00138924

THE
ASIATIC SOCIETY OF BOMBAY
Town Hall, Bombay.

Digitized with financial assistance from
Observer Research Foundation
on 17 May, 2019

THE

# BIRDS OF ASIA.

BY


## JOHN GOULD, F.R.S.,

F.L.S., V.P. AND F.Z.S., M.E.S., F.R.GEOGR.S., M.R.A.Y.S., CORR. MEMB. OF THE ROYAL ACADEMY OF SCIENCES OF TURIN; OF THE SOC. OF THE MUSEUM OF NAT. HIST. OF STRASBURG; FOR. MEMB. OF THE NAT. HIST. SOC. OF NÜRNBERG, AND OF THE IMP. NAT. HIST. SOC. OF MOSCOW; HON. MEMB. OF THE NAT. HIST. SOC. OF DARMSTADT; OF THE NAT. HIST. AND THE NAT. HIST. AND MED. SOCS. OF DRESDEN; OF THE ROY. SOC. OF TASMANIA; OF THE ROY. ZOOL. SOC. OF IRELAND; OF THE PENZANCE NAT. HIST. SOC.; OF THE WORCESTER NAT. HIST. SOC.; OF THE NORTHUMBERLAND, DURHAM, AND NEWCASTLE NAT. HIST. SOC.; OF THE IPSWICH MUSEUM; OF THE ORN. SOC. OF GERMANY; OF THE DORSET COUNTY MUSEUM AND LIBRARY; OF THE ROYAL UNITED SERVICE INSTITUTION, ETC.



138924


DEDICATED TO THE HONOURABLE EAST INDIA COMPANY.

IN SEVEN VOLUMES.

VOLUME V.


LONDON:

PRINTED BY TAYLOR AND FRANCIS, RED LION COURT, FLEET STREET.

PUBLISHED BY THE AUTHOR, 26 CHARLOTTE STREET, BEDFORD SQUARE.

1850—1883.

00138924

# LIST OF PLATES.

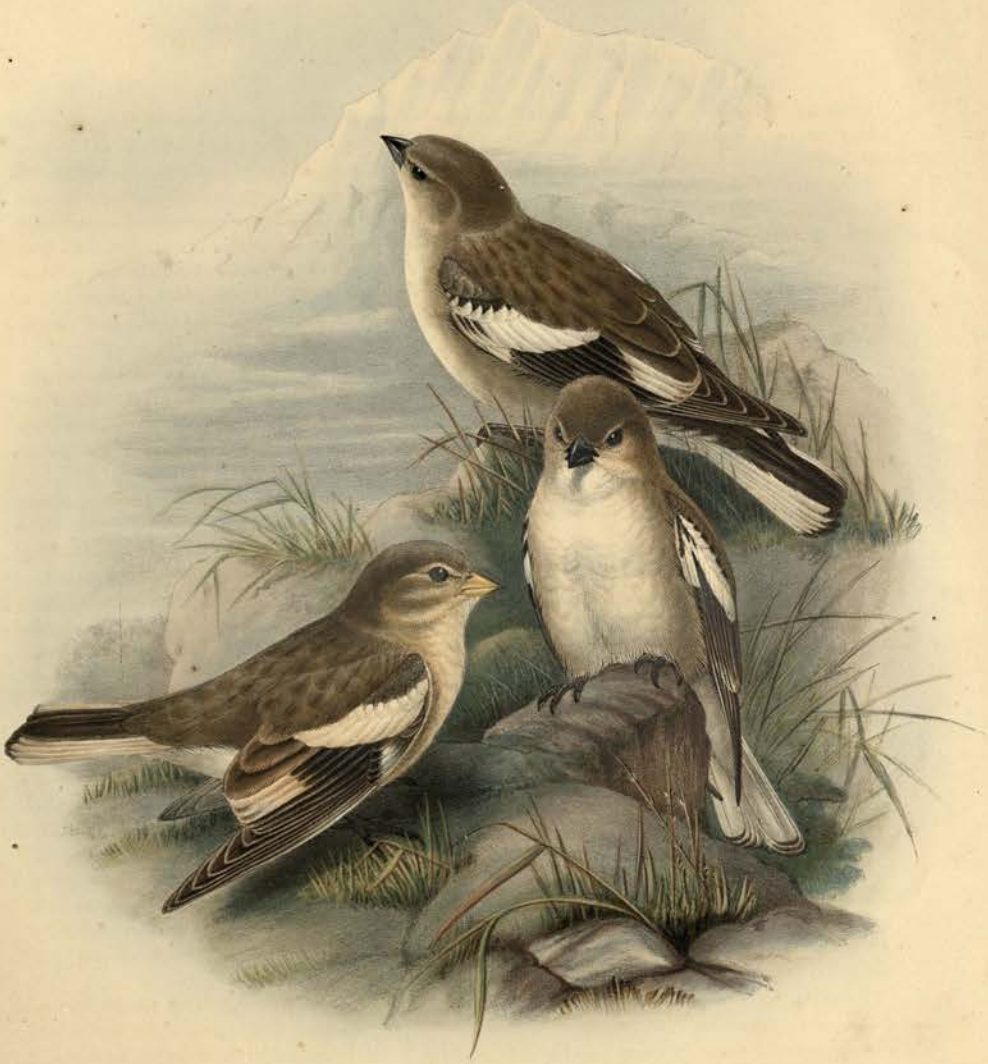
## VOLUME V.

Note.—As the arrangement of the Plates in the course of publication was impracticable, the Numbers here given will refer to them when arranged, and the Plates may be quoted by them.

| Plate | | | Part | Date. |
|---|---|---|---|---|
| 1. | Montifringilla Adamsii | Adams's Mountain Finch | XIX. | May 1867. |
| 2. | „ arctoa | Northern Mountain Finch | III. | June 1851. |
| 3. | „ hæmatopygia | Red-rumped Mountain Finch | „ | „ „ |
| 4. | „ brunneinucha | Brown-naped Mountain Finch | IV. | November 1852. |
| 5. | „ ruficollis | Red-necked Mountain Finch | XXVII. | March 1875. |
| 6. | Emberiza caniceps | Grey-capped Bunting | VI. | July 1854. |
| 7. | „ pusilla | Dwarf Bunting | XIX. | May 1867. |
| 8. | „ cinerea | Cinereous Bunting | XXII. | March 1870. |
| 9. | „ fucata | Painted Bunting | XXI. | April 1869. |
| 10. | „ rustica | Rustic Bunting | „ | „ „ |
| 11. | Glycyspina Huttoni | Hutton's Bunting | „ | „ „ |
| 12. | Euspiza elegans | Elegant Bunting | XXXII. | July 1880. |
| 13. | „ melanocephala | Black-headed Bunting | XXII. | March 1870. |
| 14. | „ luteola | Red-headed Bunting | „ | „ „ |
| 15. | Passer ammodendri | Turkestan Sparrow | XXIV. | March 1872. |
| 16. | Fringilla Burtoni | Burton's Grosbeak | I. | *January 1850.* |
| 17. | Carduelis orientalis | Eastern Goldfinch | XXX. | *October 1877.* |
| 18. | Euphona personata | Masked Grosbeak | III. | June 1851. |
| 19. | „ melanura | Black-tailed Grosbeak | „ | „ „ |
| 20. | Mycerobas melanoxanthus | Black-and-Yellow Grosbeak | „ | „ „ |
| 21. | „ carneipes | Flesh-footed Grosbeak | „ | „ „ |
| 22. | Hesperiphona icterioïdes | Icterine Grosbeak | „ | „ „ |
| 23. | „ affinis | Allied Grosbeak | XX. | April 1868. |
| 24. | Hæmatospiza Sipahi | Sepoy Finch | IV. | November 1852. |
| 25. | Carpodacus rubicilla | Caucasian Grosbeak | „ | „ „ |
| 26. | „ rhodochlamys | Red-mantled Grosbeak | „ | „ „ |
| 27. | Uragus sibiricus | Siberian Grosbeak | XXXV. | August 1883. |
| 28. | Rhodopechys sanguinea | Crimson-winged Finch | XXIX. | April 1877. |
| 29. | Erythrospiza obsoleta | Rosy-winged Finch | „ | „ „ |
| 30. | „ incarnata | Rosy Finch | „ | „ „ |
| 31. | „ githaginea | Trumpeter Bullfinch | XXXII. | July 1880. |
| 32. | Urocynchramus Pylzowi | Pylzoff's Rose-Bunting | XXXI. | July 1879. |
| 33. | Carpodacus roseus | Rosy Grosbeak | „ | „ „ |
| 34. | Pyrrhula aurantia | Orange-coloured Bullfinch | X. | June 1858. |
| 35. | „ orientalis | Oriental Bullfinch | V. | October 1853. |
| 36. | „ erythrocephala | Red-headed Bullfinch | „ | „ „ |
| 37. | „ Nipalensis | Nepaulese Bullfinch | „ | „ „ |
| 38. | „ major | Northern Bullfinch | XXXII. | July 1880. |
| 39. | „ erithacus | Beavan's Bullfinch | „ | „ „ |
| 40. | „ cineracea | Cinereous Bullfinch | XXVII. | March 1875. |
| 41. | Loxia Himalayana | Himalayan Crossbill | XIII. | June 1860. |
| 42. | Sturnus unicolor | Sardinian Starling | XXIX. | April 1877. |
| 43. | „ Humii | Hume's Starling | „ | „ „ |
| 44. | „ purpurascens | Persian Starling | XXII. | March 1870. |

# LIST OF PLATES.

| Plate | | | Part | Date. |
|---|---|---|---|---|
| 45. | Amydrus Tristrami | Tristram's Amydrus | XI. | *May 1859.* |
| 46. | Urocissa cærulea | Formosan Blue Pie | XVI. | April 1864. |
| 47. | „ occipitalis | Nepaulese Blue Pie | XIII. | May 1861. |
| 48. | „ Sinensis | Chinese Blue Pie | „ | „ „ |
| 49. | „ magnirostris | Great-billed Blue Pie | „ | „ „ |
| 50. | „ flavirostris | Yellow-billed Blue Pie | „ | „ „ |
| 51. | „ cucullata | White-capped Blue Pie | „ | „ „ |
| 52. | Crypsirhina cucullata | Hooded Crypsirhina | XV. | June 1863. |
| 53. | Cissa pyrrhocyanea | Red-and-Blue Cissa | I. | January 1850. |
| 54. | „ venatoria | Hunting Cissa | IX. | May 1857. |
| 55. | Pica leucoptera | White-winged Magpie | XIV. | May 1862. |
| 56. | „ Bactriana | Affghan Magpie | XV. | June 1863. |
| 57. | „ Bottanensis | Bootan Magpie | „ | „ „ |
| 58. | Garrulus Taivanus | Formosan Jay | XVI. | April 1864. |
| 59. | Nucifraga multipunctata | Many-spotted Nutcracker | I. | January 1850. |
| 60. | Podoces Biddulphi | Biddulph's Podoces | XXVII. | March 1875. |
| 61. | „ Hendersoni | Henderson's Podoces | „ | „ „ |
| 62. | „ Panderi | Pander's Podoces | „ | „ „ |
| 63. | „ humilis | Dingy Podoces | „ | „ „ |
| 64. | Pitta bengalensis | Bengal Pitta | XXIII. | March 1871. |
| 65. | „ oreas | Formosan Pitta | „ | „ „ |
| 66. | „ Ellioti | Elliot's Pitta | XXXI. | July 1879. |
| 67. | „ granatina | Bornean Pitta | „ | „ „ |
| 68. | „ coccinea | Malaccan Pitta | „ | „ „ |
| 69. | „ arquata | Necklaced Pitta | XXIV. | March 1872. |
| 70. | „ megarhyncha | Large-billed Pitta | „ | „ „ |
| 71. | „ Kochi | Koch's Pitta | XXXII. | July 1880. |
| 72. | „ Baudii | Red-backed Pitta | XXIX. | April 1877. |
| 73. | „ Gurneyi | Gurney's Pitta | „ | „ „ |
| 74. | „ Steerii | Steere's Pitta | „ | „ „ |
| 75. | „ Ussheri | Ussher's Pitta | „ | „ „ |
| 76. | „ atricapilla | Black-headed Pitta | IV. | November 1852. |
| 77. | „ cyanura | Blue-tailed Pitta | XV. | June 1863. |
| 78. | „ Schwaneri | Schwaner's Pitta | „ | „ „ |
| 79. | „ Nipalensis | Nepaul Pitta | I. | January 1850. |
| 80. | „ cyanea | Blue Pitta | „ | „ „ |
| 81. | „ cærulea | Cærulean Pitta | XXX. | October 1877. |
| 82. | „ cucullata | Hooded Pitta | „ | „ „ |
| 83. | „ Boschii | Van der Bosch's Pitta | XXV. | March 1873. |



MONTIFRINGILLA ADAMSI. *Moore*

J. Gould & H.C. Richter del. et lith.

Walter Imp

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

# MONTIFRINGILLA ADAMSI, *Moore.*

## Adams's Mountain-Finch.

*Montifringilla Adamsi*, Moore in Proc. of Zool. Soc., part xxvi. (1858) p. 482.—Adams in Proc of Zool. Soc., part xxvii. (1859) p. 178, Aves, pl. clvi.

---

I CONSIDER this rare bird to be precisely of the same form as the *Montifringilla nivalis* of Europe; at the same time no two birds of one and the same genus can be more specifically distinct. For its discovery we are indebted to the researches of Dr. A. Leith Adams, of the 22nd Regiment, after whom it has been named by Mr. Frederic Moore, as a just tribute to the labours of that gentleman in the cause of zoological science. And I may add that there are few persons holding Her Majesty's Commission who have more closely devoted their talents to the investigation of the ornithology of the countries to which their professional duties have called them than Dr. Adams; and we are largely indebted to him for the great amount of information he has furnished us with regard to the birds inhabiting Cashmere, Scinde, and Malta; his leisure moments are, in fact, always devoted, with a beneficial result, to the natural productions of the country in which, for the time, he may be located.

Like many other birds which are denizens of the uplands of Europe, Thibet, Tartary and Siberia, the present species is utterly destitute of any fine colouring, but is especially recommended to the notice of the ornithologist from the circumstance of its forming an additional species of a family of birds which finds favour with every one—the Mountain-Finches and their allies, which comprise members of the genera *Plectrophanes*, *Leucosticte*, *Fringilla*, *Linaria*, &c.

The following notes by Dr. Adams, which I take the liberty of appending, contain all that is known respecting the present bird:—

"This new and, until lately, undescribed species is a native of the barren wastes and mountains of Ladakh, particularly those near the Lamestry at Lamayeroo, where it feeds upon the seeds of the few plants growing in those desolate and dreary regions. It is generally seen in small flocks, is strictly terrestrial in its habits, and in its call-note and mode of progression when on the ground it is very similar to the true Larks. The nest is composed of dry grass, and is usually placed in stony places by the wayside, and in the long dykes built by the Tartars over their dead. My specimens were shot in July 1852.

"I am indebted to Sir William Jardine, Bart., for directing my attention to the specific differences of this bird; and I take this opportunity of expressing my obligations to that distinguished naturalist for his valuable assistance on many points connected with the natural history of India."

Whether the sexes present any difference in external appearance is unknown; in all probability they will be very similar in colouring; the young bird of the year, my figure of which was taken from a specimen obtained in Kulu by the late Major W. E. Hay, differs from the adults in having a pale yellow bill, and a much more buff or tawny plumage, with less of the contrasted black and white on the wings.

Head and upper surface pale greyish brown or ash-colour; wings brownish black, the greater coverts and secondaries tipped with white; spurious wing white, each feather tipped with brown; two centre tail-feathers brownish black; the lateral ones white, narrowly tipped with black, the amount of the latter colour decreasing as the feathers recede from the centre ones; under surface creamy white; bill, legs, and feet black.

The colouring of the immature bird is generally lighter; the secondaries and outer tail-feathers are washed on the edges with buff; the white of the wing-coverts is less pure, and, owing to the less amount of depth in the brown of the wings, does not offer so strong a contrast as in the adult; the under surface is pale buff, and the bill yellow.

The Plate represents two adults, and a young bird, of the natural size.

MONTIFRINGILLA ARCTOA.

J. Gould and H.C. Richter del. et lith.

Hullmandel & Walton Imp.

# MONTIFRINGILLA ARCTOA.

## Northern Mountain Finch.

*Passer arctous*, Pall. Zoog., tom. ii. p. 21. No. 191.
*Fringilla (Linaria) arctoa*, Brandt, Bull. des Acad. Sci. de St. Pétersb., Feb. 3, 1843.
——— *arctoa*, Gray and Mitch. Gen. of Birds, vol. ii. p. 372, *Fringilla*, sp. 63.
*Montifringilla arctoa*, Bonap. et Schl. Mon. des Loxiens, p. 38. pls. 44 and 45.

---

As is the case with most of the Siberian birds, little is known of the habits and economy of the Northern Mountain Finch; I have therefore the greater pleasure in transcribing the following brief notes on the subject from the "Monographie des Loxiens" of my friends Bonaparte and Schlegel:—

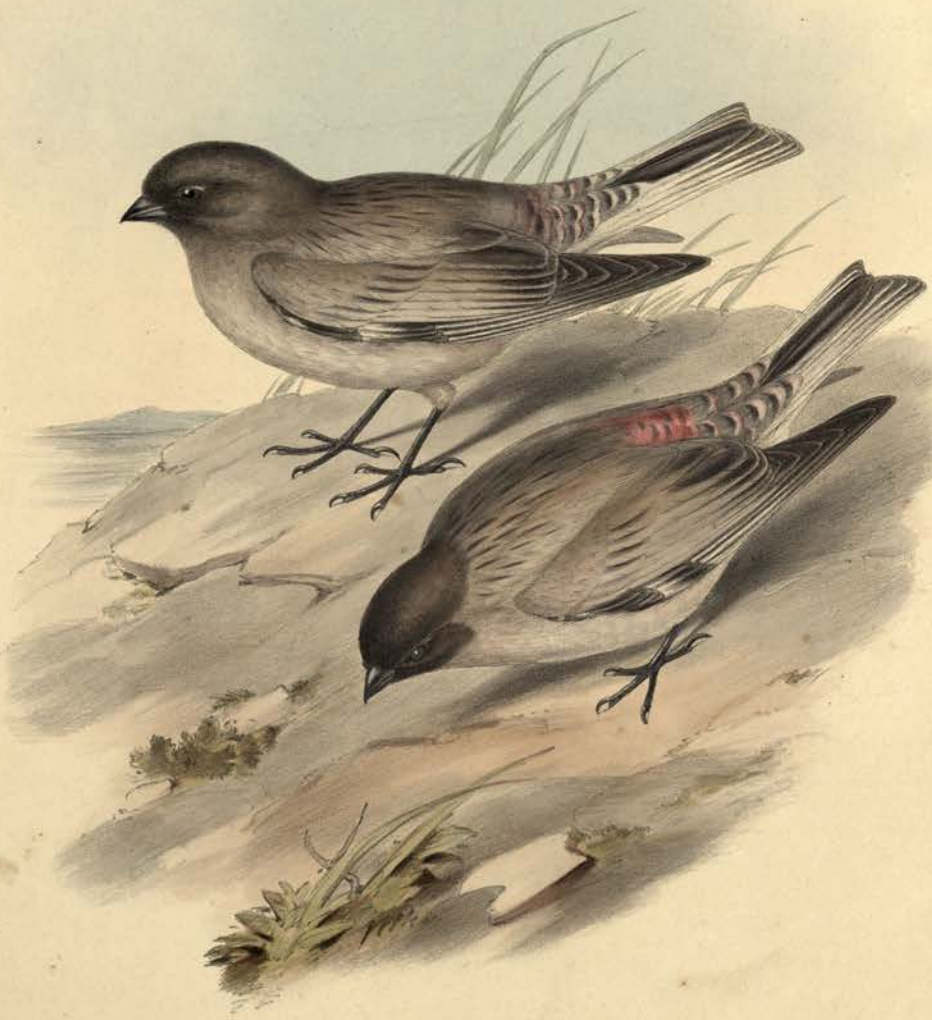
"This species, of which examples are to be seen in most of our collections, inhabits nearly the whole of Siberia; we have specimens which had been killed on the mountains bordering the River Obi, upon the Aleutian Islands, and upon the Kuriles. Pallas states that it is found in the polar regions of Siberia, and that it only visits the central parts of that vast country in winter; at which season it frequents the villages in pairs, mingled with wandering flocks of linnets. Not being able to support the heat, it returns towards the northern regions from the end of the month of February to the commencement of May. Steller met with it in the month of December upon Behring's Island. It is a stupid bird and easily captured; when pursued it thrusts its head in the grass, and believing itself in safety, allows itself to be taken by the hand. It feeds principally upon the seeds of the *Umbelliferæ*."

The male has the head brownish grey, each feather bordered with black; nape, back and sides of the neck light reddish brown; back, scapularies, under surface and the lesser wing-coverts dark brown, washed on the flanks with purple, and the feathers of the breast with greyish tips; outer margin of the wing-feathers pearly grey, their tips and inner webs very dark brown; upper tail-coverts and tail pearly grey passing into black at the tip, and with black shafts; bill and feet black.

The plumage of the winter season is similar in colour, but is destitute of the purple wash on the flanks; and the bill is wax-yellow, except at the point.

The female is distinguished from the male by her paler colouring, the general plumage being of a greyish brown, except on the back, which is yellowish brown streaked with dark brown.

The Plate represents the two sexes of the natural size.



MONTIFRINGILLA HAEMATOPYGIA. *Gould*

*J. Gould. and H.C. Richter del. et lith.*

*Published by Walton Brig.*

# MONTIFRINGILLA HÆMATOPYGIA, *Gould.*

## Red-rumped Mountain Finch.

*Montifringilla hæmatopygia*, Gould in Proc. of Zool. Soc., Mar. 25, 1851.

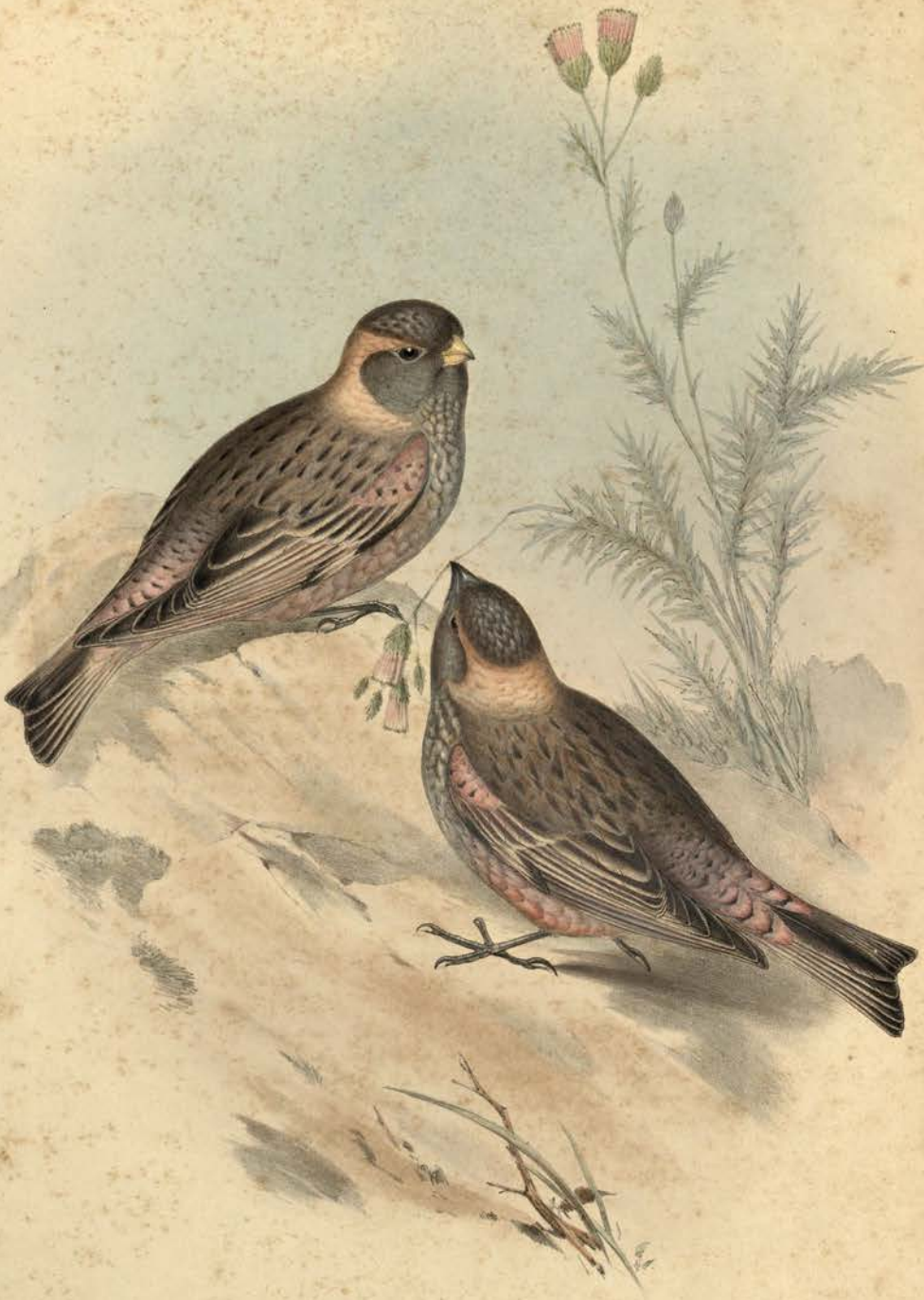
---

The specimens from which the accompanying figures were taken were killed in Thibet by Lord Gifford; they belong to a species intimately allied to the *Fringilla* (*Linaria*) *Gebleri* of M. Brandt, but which differs from it in its larger size, in the darker colour of the head and face, and in the darker colouring of the back and rump, which latter is moreover ornamented with a patch of blood-red; it is also destitute of the orange-red mark on the shoulders, which M. Brandt states to be characteristic of his species.

I am indebted to Lord Gifford for the loan of this fine bird, which is second in interest only to the new and beautiful *Syrrhaptes Thibetanus*, also brought by his lordship, and of which figures will be found in their proper place in this work.

Face and forehead brownish black, gradually blending into the light greyish brown of the upper surface; rump stained with blood-red; upper tail-coverts brown, tipped with dull white; tail dark brown, each feather margined externally with white; wing-coverts hoary; wings dark brown, the first four primaries narrowly edged with white, the next five primaries with a broad streak of white along the basal portion of their external webs terminating in a line with the extremities of the secondaries, which are externally fringed with hoary; spurious wing dark brown, margined at the base with whitish; under surface very light brown, gradually becoming paler, until on the under tail-coverts the hue is buffy white; bill and feet bluish black.

The Plate represents the two sexes of the natural size.



MONTIFRUGILLA BRUNNEINUCHA.

J. Gould and H. C. Richter, del. et lith.

Hullmandel & Walton, Imp.

# MONTIFRINGILLA BRUNNEINUCHA.

## Brown-naped Mountain Finch.

*Passer arctous*, var. B. 2, Pall. Zoog., tom. ii. p. 22.
*Fringilla (Linaria) brunnionucha*, Brandt, Bull. de l'Acad. Sci. de St. Pétersb. Nov. 26, 1841, p. 35.
*Montifringilla brunneinucha*, Bonap. et Schlegel, Mon. des Loxiens, p. 36. pl. 42.
*Leucosticte brunneinucha*, Bonap. Consp. Gen. Av. p. 536, *Leucosticte*, sp. 2.
*Fringilla brunneonucha*, Gray and Mitch. Gen. of Birds, vol. ii. p. 372, *Fringilla*, sp. 65.

---

Eastern Asia appears to be the head-quarters of the members of the genus *Montifringilla*, for it is there that the greater number of them are found. The species here represented is conspicuous, like its allies, for the beauty of its colouring and the elegance of its form; it is one of those with which Pallas made us acquainted, and it is from the duplicates of the great collection at St. Petersburg that the more southern museums have been supplied with specimens. The Directors of the Museum at Bremen, and T. B. Wilson, Esq., have both favoured me with specimens to figure from; and I trust that the accompanying Plate will be found a faithful representation of a bird drest in the most harmonious and beautiful combination of colours that can be imagined, and which render it one of the finest species of the genus to which it belongs. Kamtschatka, the Kurile Islands, and the neighbouring portion of Asia are its natural habitat.

The Plate represents two individuals killed at different periods of the year; the black-billed bird exhibiting the plumage of summer, and the other that of the opposite season.

Crown of the head grey, the feathers margined with brown; chin, cheeks and ear-coverts grey; plumes of the throat blackish brown, bordered with rosy grey; feathers of the remainder of the under surface blackish brown at the base and of a rosy hue for the remainder of their length, the rosy tint being pale on the breast and becoming gradually deeper on the abdomen; lesser wing-coverts, rump and upper tail-coverts of a blackish brown, largely tipped with rosy red; greater wing-coverts, quills and tail deep black, bordered with a much paler tint, and washed with rose-colour on the outer edges of the primaries and the bases of the tail-feathers; at the back of the neck a broad crescent of pale reddish brown; back and scapularies deep brown, bordered with brownish red; bill black at some seasons and yellow at others; feet dark brown.

The figures are of the natural size. The plant is the *Serratula dissecta* of botanists.

MONTIFRINGILLA RUFICOLLIS. *W.T.Blanford*

Wrenald & W.Hart del et lith.

Walter Imp.

# MONTIFRINGILLA RUFICOLLIS, *Blanford.*

## Red-necked Mountain-Finch.

*Montifringilla ruficollis*, Blanf., J. A. S. B., xli. p. 67 (1872).

---

The birds composing the genus *Montifringilla* are truly, as their name implies, inhabitants of the mountains, being found in the elevated ranges from the Alps of Southern Europe to the Himalayas. The one which I now figure seems to be the smallest of the genus; but it is at the same time the prettiest and most conspicuously marked; and I consider Mr. Blanford very fortunate in crowning the difficult journey which he made in company with Captain Elwes to the Thibetan frontier, by the discovery of such an interesting species.

"This bird," writes Mr. Blanford, "differs widely from every described form. In structure it is closely allied to *M. nivalis*, and differs from *Leucosticte* in its shorter wings and tail. The plumage may become whiter in winter.

"I met with one flock of this new Finch near Kangra Lama pass, and with another at Prálúng, both places inhabited by purely Thibetan forms, and at elevations of 15000 to 16000 feet. It is probably common in Thibet. Dr. Stoliczka is of opinion that it is the same as the undescribed *Montifringilla* found by him in Ladak (J. A. S. B. 1868, pt. ii. p. 62), but of which his specimen is not now in Calcutta."

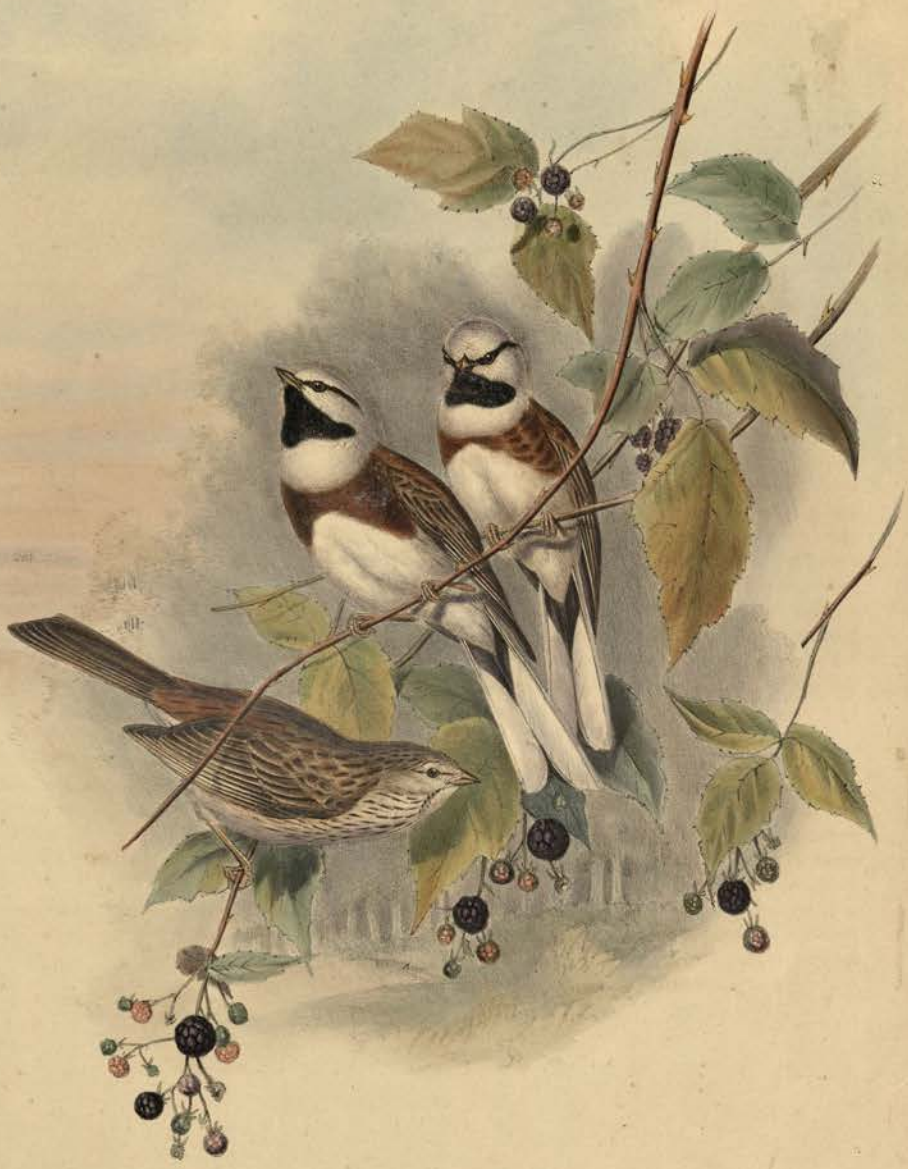
Subjoined is Mr. Blanford's original description.

"*Male*.—Forehead whitish, passing into the rather pale umber-brown of the head; supercilia white; lores and a line from them passing under the eye black, this line is continued posteriorly over the ear-coverts, and its colour changes to dark ferruginous; back umber-brown, with broad central dusky streaks to the feathers; rump more ferruginous; wings brown, the first primary with the outer web white, the others with fulvous outer margins, all with white internal edges and a broad white wing-band, only visible on the expanded wing, formed by a large spot on the inner webs of all the primaries except the first four, and the whole basal portion of the inner web of the remaining quills except the last three, which have broad fulvous borders; smaller wing-coverts mostly white, angle of wing greyish; upper tail-coverts very long, pale umber with a fulvous tinge; central tail-feathers and the tips of the remainder for about half an inch dark brown, with fulvous margins; basal portion of all the tail-feathers except the central pair pale ashy, with some white, on both inner and outer webs, between the grey portion and the brown tips, increasing in quantity on the outer feathers and running up the external web, which is entirely white in the outermost pair; sides of the head below the black eye-streak, chin, and throat white, with two black lines, one from each side of the base of the lower mandible, running backwards and diverging; ear-coverts bright ferruginous; sides of the neck the same, but a little paler, the rufous tint forming a semi-collar, only interrupted for a very narrow space in front; remainder of the lower parts white, with an isabelline tinge. Iris reddish brown, bill and legs black.

"The female wants the whitish forehead and the rufescent tinge on the rump; the demi-collar is brown posteriorly, and, in the only specimen obtained, it is continuous round the front of the neck.

| | Wing. | Tail. | Tarsus. | Hind claw. | Bill from forehead. | Bill from gape. |
|---|---|---|---|---|---|---|
| "*Male* . . . . | 3·63 | 3·23 | 0·85 | 0·36 | 0·42 | 0·53. |
| *Female* . . . . | 3·56 | 2·1 | 0·87 | 0·32 | 0·43 | 0·54." |

The figures in the accompanying Plate were drawn from the types, for the loan of which I have to thank Mr. Blanford. They are of the size of life.



EMBERIZA CANICEPS, *Gould*

J. Gould and H.C. Richter del. et lith. Hullmandel & Walton Imp.

# EMBERIZA CANICEPS, *Gould.*

## Grey-capped Bunting.

*Emberiza caniceps*, Gould in Proc. of Zool. Soc. 1853.

---

In the collection transmitted to Andrew Murray, Esq., of Aberdeen, by his brother Dr. John Murray, are several examples of this conspicuously marked species of *Emberiza*, which, I believe, were collected in the neighbourhood of Agra; my own collection also contains examples of both sexes sent direct from Afghanistan. I do not, however strange it may appear, find specimens in any of our public museums, neither have I succeeded in discovering that it has been named or described, or any account recorded of its habits, in either of the numerous journals or other publications on Indian birds; Lord Arthur Hay, who has also seen specimens from Afghanistan, is not aware that it has received a specific appellation. I am therefore induced to regard it as new, and to figure it as such under the name of *Emberiza caniceps*; it is a somewhat smaller and more delicately formed bird than the *E. citrinella* or the *E. cirlus*, to which section of the Buntings I consider it to belong. The sexes offer the usual difference in colour, the female being destitute of the rich markings which form so conspicuous a feature in the opposite sex.

I at first thought it likely that this bird might be the *Emberiza albida* of Mr. Blyth, but in his remarks on that species he does not allude to any black mark on the throat, and the admeasurements given appear to have reference to a much larger bird than the one here represented.

The male has the forehead and crown greyish white; lores and a broad line passing over the eye to the nape and the throat black; cheeks and ear-coverts white; back, scapularies, rump and upper tail-coverts deep reddish chestnut; wing-coverts dark brown, edged with buffy brown; wings brown, narrowly edged with greyish white; central tail-feathers blackish brown, the two outer ones on each side blackish brown at the base, and white for the remainder of their length, with the exception of the outer web, which is brown; under surface creamy white, crossed on the chest by a broad band of lively chestnut-red; bill and feet fleshy brown.

The female has the whole upper surface, wings and tail pale olive-brown, with a streak of dark brown down the centre of each feather; a slight wash of rufous on the upper tail-coverts; throat and flanks pale buffy brown, streaked with dark brown.

The figures represent the two sexes of the size of life.

EMBERIZA PUSILLA, *Pall.*

J.Gould & H.C.Richter del. et lith.

Waltsr. Imp.

# EMBERIZA PUSILLA, *Pall.*

## Dwarf Bunting.

*Emberiza pusilla*, Pall. Reise, tom iii. p. 697.—Id. Zoog. Rosso-Asiat., tom. ii. p. 42, pl. 47. fig. 1.—Gmel. edit. Linn. Syst. Nat., tom. i. p. 871.—Lath. Ind. Orn., vol. i. p. 414.—Shaw, Gen. Zool., vol. ix. p. 394, Bonap. Consp. Gen. Av., tom. i. p. 464, *Emberiza*, sp. 4.—Gray, Gen. of Birds, vol. ii. p. 377, *Emberiza*, sp. 14.—Blyth, Journ. Asiat. Soc. Beng., vol. xv. p. 40.—Schleg. Rev. Crit. des Ois. d'Eur., p. lxxi.—Schrenck, Vög. des Amurlandes, p. 289.—Midd. Sibir. Reise, Bd. xi. tab. xiii. fig. 4 A.—Gould in Proc. Zool. Soc. 1864, p. 377.—Bree, Hist. of Birds of Eur. not obs. in Brit. Isles, vol. iii. p. 65.—Schleg. Verh. Teyler's Haarlem, 1849, tab. v.—Jerd. Birds of India, vol. ii. part i. p. 376.

——— *sordida*, Hodgs. Journ. Asiat. Soc. Beng., vol. xiii. p. 958.

——— *oinops*, subg. *Ocyris*, Hodgs. Proc. of Zool. Soc., part xiii. (1845) p. 35.—Ann. and Mag. Nat. Hist., vol. xvi. p. 205.

*Euspiza pusilla*? Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 130.

*Emberiza oinops*, Gray, Cat. of Spec. and Draw. of Mamm. and Birds pres. to Brit. Mus. by B. H. Hodgson, Esq., p. 108.

*Ocyris oinopus*, Hodgs. in Gray's Zool. Misc. 1844, p. 84.—Horsf. and Moore, Cat. of Birds in Mus. East-Ind. Comp., vol. ii. p. 488.

*Dwarf Bunting*, Lath. Gen. Syn. Supp., vol. ii. p. 201.—Id. Gen. Hist., vol. v. p. 326.

---

This is one of the most ubiquitous Buntings in existence; for it is spread far and wide over the northern portion of the Old World, being found in China, in the Amoorland, the Himalayas, the Daurian Alps, India, the northern and central parts of Europe, accidentally in Heligoland, and once at least in Britain.

Pallas, who was the first to make us aware of its existence, states that it inhabits the neighbourhood of the rivers and the larch-grounds among the torrents of the Daurian Alps; Mr. Hodgson includes it in his list of the Birds of Nepaul; Mr. Swinhoe remarks that in North China it occurs in small flocks on the banks of canals and the edges of waterpools between Takoo and Peking, and that in winter a few visit the southern parts of that country; and Mr. Jerdon says:—"This small Bunting is found throughout the whole extent of the Himalayas during the winter. I procured it at Darjeling, Hodgson in Nepal, and Adams in the north-west. It frequents bare spots of ground with low bushes in small flocks. Adams says it has the habits of a Redpole. I shot one near Kolassee, in the Purneah district, frequenting grass and bushes near a small river; and as it is a bird not likely to be remarked, it will probably be found in similar places throughout the plains in the north of India during the cold weather."

"The only specimen of this small Bunting that we brought home," says Herr Gustav Radde, "I shot on the 18th September, on the upper Amoor, a little below the mouth of the Oldoi. It was a female that quite agrees with Pallas's description. In the autumn dress, the feathers of the head have rust-yellow edges, which make both the black side stripes and rust-coloured middle stripes somewhat indistinct, and only to show in spots. I found a nest of this Bunting in the lower Amoorland, in a scanty part of the pine-wood forest between the lake of Kidsi and the sea-coast. It lay on the ground between moor tussocks, and was artlessly made of spines of the larch and pine. The eggs in it, five in number, were exactly of the size and form described by Middendorf, viz. strongly tapering, 17·5 millim. long, and 14 broad, covered, on a dirty-white ground, all over with very many violet-brown spots and markings: on the 17th June they were still quite unincubated. We may observe, by the way, that here and there between the tussocks in the wood there lay remains of snow." (Schrenck's 'Vögel des Amurlandes,' p. 289.)

"Occiput, cheeks, and part of the throat ferruginous, with two distinct deep-black irregular bands extending from the base of the upper mandible over each eye, where they turn round, and in some specimens form a more or less complete collar round the neck, mingled with white or fawn-colour; throat more or less white, mingled with the ferruginous colour of the occiput and cheeks; base of the inner web of the external tail-feather white, that of the second the same, but only half as wide. First and third primaries of nearly equal length, the second the longest in the wing. Length of male five inches and three-tenths; carpus to tip three inches; tail two inches and a half; beak two-fifths of an inch; tarsus seven-tenths of an inch." (Dr. Bree.)

Mr. Jerdon says, "the female is dull olive-greenish, with a rufous tinge; wing-coverts tipped whitish; beneath whitish yellow, sullied on the breast, and streaked on the flanks and sides of the foreneck,"—and describes the bill of the male as "horny; legs pale fleshy-brown; irides brown."

The figures are of the natural size.

EMBERIZA CINEREA. *Strickl.*

J.Gould & H.C.Richter del. et lith.

Walter Imp.

# EMBERIZA CINEREA, *Strickl.*

## Cinereous Bunting.

*Emberiza cinerea*, Strickl. in Proc. Zool. Soc., part iv., 1836, p. 99.—Gray & Mitch. Gen. of Birds, vol. ii. p. 377, *Emberiza*, sp. 12.—Bonap. Consp. Gen. Av., tom. i. p. 464, *Emberiza*, sp. 5.—Jard. Mem. of Strickl., p. clxiii.

---

It gives me great pleasure to figure in the 'Birds of Asia' this very rare species of Bunting, inasmuch as it affords me an opportunity of reminding my readers, if indeed, such a reminder were necessary, of the existence, discoveries, and writings of the late Hugh E. Strickland, whose early, sad, and lamented death is still and will long be retained in the memory of his many friends and admirers, among whom I am happy to be numbered. More especially do I figure this bird with pleasure, since Strickland not only gave it a name, but was its first discriminator. The original description appeared in his "List of Birds noticed or obtained in Asia Minor in the winter of 1835 and spring of 1836," published in the 'Proceedings of the Zoological Society' for the latter year, p. 97; the specimen from which it was taken is now in the Cambridge University Museum, to which the whole of Strickland's collections have been presented by his widow, the second daughter of that veteran ornithologist Sir William Jardine, Bart. I have two in my own cabinet, sent to this country direct from Smyrna by Dr. Kruper, and I hear that many others have been collected in the same locality; still the bird is so rare and so little known to ornithologists, that some of them have even questioned its existence, and others have considered it a mere variety of some previously known species; but these doubts will, I think, be readily dispelled from the mind of any one, conversant with birds, who will be good enough to examine my figures in the accompanying Plate, or obtain specimens from the neighbourhood of Smyrna, where it was met with by Strickland, and where we now know it is by no means uncommon.

At a first glance the bird would appear to be a *Euspiza* or a *Glycyspina*; but it is really a true Bunting, the knob under the roof of the upper mandible being as conspicuous as in the most typical of the *Emberizinæ*. As is usual with this group of birds, the sexes are very different in colouring, the female being destitute of the yellow tint on the head which distinguishes the male, and consequently is a more sombre-looking bird, as will be seen on reference to the figures of the two sexes on my Plate.

Nothing, so far as I am able to ascertain, is on record respecting the habits and economy of this Bunting. The following is Strickland's description, upon which I cannot improve:—

"*Male.* Crown of the head greenish yellow, becoming cinereous at the nape; back cinereo-fuscous, with an obscure streak of brown down the middle of each feather; rump cinereous; tail dark brown, the two lateral pairs of feathers white on the inner web for nearly half their length towards the extremities; wings dark brown, the coverts and quills margined with whitish, the scapularies with fulvous; chin and throat yellow, becoming greenish on the cheeks; breast cinereous; abdomen white; sides cinereous; bill dusky; legs flesh-colour.

"Total length 6 inches, bill $\frac{2}{5}$, wing $3\frac{1}{4}$, tail $2\frac{3}{4}$, tarsi $\frac{3}{4}$.

"The beak of this species most nearly resembles that of *Emberiza cia.*

"Habitat. The low hills near Smyrna. Killed in April."

The female is characterized, as above mentioned, by the absence of the yellow colouring on the face and throat, by having a gorget of small streaks of brown down the sides and across the base of the throat, and by the feathered eyelash being white instead of yellow.

The figures are of the natural size.

EMBERIZA FUCATA, *Pall*

J.Gould & H.C.Richter del. et lith.

Walter Imp.

LIBRARY OF THE BOMBAY BRANCH OF THE R. ASIATIC SOCIETY

# EMBERIZA FUCATA, *Pall.*

## Painted Bunting.

*Emberiza fucata*, Pall. Itin. App., no. 22.—Id. Zoog. Ross.-Asiat., tom. ii. p. 41, pl. 46.—Gmel. edit. Linn. Syst. Nat., tom. i. p. 871.—Lath. Ind. Orn., vol. i. p. 419.—Shaw, Gen. Zool., vol. ix. p. 385.—Blyth, Journ. Asiat. Soc. Beng., vol. xi. p. 601, vol. xiii. p. 957?—Gray, Gen. of Birds, vol. ii. p. 377, *Emberiza*, sp. 7.—Sieb. Temm. et Schleg. Faun. Jap., p. 96, tab. lvii.—Bonap. Consp. Gen. Av., tom. i. p. 464, *Emberiza*, sp. 3.—Jerd. Birds of India, vol. ii. part i. p. 375?—Blak. Ibis, 1862, p. 328.—Swinh. Ibis, 1860, p. 61, 1861, pp. 45, 334, 1863, p. 378; Proc. of Zool. Soc., 1863, pp. 301, 337.—Whitely, Ibis, 1867, p. 202.—v. Pelz. Ibis, 1868, p. 318.

——— *lesbia*, Gould, Birds of Eur., vol. iii. pl. 178.—Temm. Man. d'Orn., 2nd edit. tom. iii. p. 235.

——— *cia*, Jerd. Cat.

——— *provincialis*, Gmel. edit. Linn. Syst. Nat., tom. i. p. 881?

——— *Durazzi*, Bonap. Faun. Ital., tom. i. pl. 35, fig. 2?

*Le Gavoné de Provence*, Buff. Hist. Nat. des Ois., tom. iv. p. 321?—Id. Pl. Enl. 656. fig. i.?

*Coloured Bunting*, Lath. Gen. Syn. Supp., ii. p. 202.—Id. Gen. Hist., vol. v. p. 332.

*Euspiza fucata*, Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 129?—Id. Journ. Asiat. Soc. Beng., vol. xxiii. p. 215?—Horsf. and Moore, Cat. of Birds in Mus. East-Ind. Comp., vol. ii. p. 488?

*Onychospina fucata*, Bonap. Compt. Rend. de l'Acad. Sci., 1853, p. .

*Hypocentor fucatus*, Cab. Mus. Hein., Theil i. p. 131, note.

---

The figures in the accompanying Plate were taken from Japanese and Chinese specimens—that of the male from an example killed at Hakodadi by Mr. Henry Whitely, and that of the female from a specimen collected near Canton. I mention this particularly, because I find that Japanese and Indian examples differ considerably both in size and colour; unfortunately I have not a sufficient number of Indian birds at my command to determine with certainty whether they constitute two species, or if they must be regarded as mere local varieties; I strongly suspect, however, that the Indian bird, which is the smallest in size, and has the rufous colouring of the under surface of a deeper tint and more widely spread, has yet to receive a specific appellation, unless it should prove to be identical with Gmelin's *Emberiza provincialis*. The European bird so called certainly assimilates to Indian rather than to Chinese examples; I have therefore placed a mark of doubt against all those synonyms having reference to European and Indian birds. Siebold, Temminck, and Schlegel have given a good figure of this bird in their 'Fauna Japonica,' wherein, after mentioning that Pallas's bird was from Dauuria, they say—"the Dutch voyagers found it in Japan, and sent thence numerous examples to the Museum of the Netherlands; and it is from them that the description of *Emberiza lesbia*, given in the third volume of Temminck's 'Manual of Ornithology,' and the figure which Mr. Gould has published, under the same name, in the third volume of his 'Birds of Europe,' were taken. It has been said that some specimens of this Bunting have been observed in the South of France and in Italy; but the descriptions and figures given of them are not sufficiently accurate to prove their identity with the painted Bunting of Eastern Asia.

"This species, which is one of the most curious of its genus, is distinguished from all the others by the length of the tertiaries, which cover the primaries throughout nearly their whole length, and by the claw of the hind toe being a little longer and less curved than ordinary, which latter circumstance, recalling to our minds the Larks, Pipits, Wagtails, and other birds which mostly frequent the ground, leads one to suppose that this Bunting differs in its mode of life from all the other members of the genus, which, as is well known, gives the preference to trees. Pallas, indeed, says that it inhabits the islets and meadows of Dauuria; and to this limited information his notice of the habits of the bird is confined."

Whether the Indian bird be the same or not, I think it well to append Mr. Jerdon's account of those seen there by him:—"This Bunting appears to spread sparingly through Northern and Central India in the cold weather. It has been found in Bengal, near Calcutta occasionally, in some seasons occurring rather plentifully, also in Nepaul and the Debra Dhoon, and is not uncommon about Simla and Mussooree. I have seen it at Jalna, in the Deccan, at Mhow and at Sangor, and also near Nagpore. In most of these places it was frequenting rocky and bushy hills in small parties; and I occasionally saw it in the fields, near hedges and trees. Its Hindustani name, which means stone-grazer, is given to it from its being seen so much about rocks and stones.

"In some specimens the pectoral band is more or less imperfect, consisting chiefly of spots; and the sides of the abdomen are streaked with brown. In the cold weather the majority want the mesial streak on the

feathers of the back, the black lines from the gape, and the black pectoral band; and the lower parts are uniform whitish-cinereous, tinged with rufous on the throat and breast, and passing into reddish white or fulvous posteriorly. The ashy hue of the head, too, has a fulvous tinge. The female is said, by Blyth, to want the cinnamon-coloured band, and the colours to be generally duller."

Mr. Blyth states that it is "common in the neighbourhood of Calcutta, and frequently brought for sale in the medley of species purchased as 'Ortolans' by Europeans. Apparently an irregular and uncertain winter visitant to Lower Bengal."

Major Tytler observed some examples, and shot a male near Pakree during a march from Simla to Mus sooree.

Von Pelzeln, in his paper on "Birds from Thibet and the Himalayas," states that examples were found at Serahan, Tranda, and Gaora.

Mr. Swinhoe informs us that the true *E. fucata* is "a winter visitant to Formosa, but is not common there;" that he has found it between Takoo and Pekin, in North China, and that it winters in South China; he has "met with it among standing grain during winter; but it was difficult to procure, from its habit of dropping under cover of the grain and seldom perching in exposed places." It is more or less common, and, he thinks, resident, in Hongkong, Macao, and Canton.

Mr. Henry Whitely informs us that "this bird is rather common at Hakodadi. My specimens, shot in October, had the bill brown, the irides dark hazel, and the legs and toes brownish flesh-colour."

The male has the head and neck dark grey, with a streak of brownish black down the centre of each feather; feathers of the back brownish black, margined with rufous; lower part of the back rufous, deepest in tint down the centre of each feather, gradually passing into dull grey with black centres on the upper tail-coverts; lesser wing-coverts rusty red; greater coverts blackish brown, with buffy grey margins and lighter tips; primaries brown, finely margined with reddish grey; lengthened tertiaries brownish black, bordered externally with greyish white; over the eye a light superciliary stripe; ear-coverts deep rufous; throat and breast greyish white; from each angle of the gape proceeds a narrow black streak, which increase in breadth as they descend, and unite on the breast, forming a gorget; on each side of this gorget the feathers are white, with black centres; immediately below it a narrow band of rufous; abdomen buffy white, washed with rufous and streaked with blackish brown on the flanks; tail brown, the central feathers margined with greyish fawn-colour, and the outer feather with a line of white down the inner web next the shaft, increasing in breadth from the base to the end.

The female is similar, but very much paler-coloured on the upper surface, has the under surface buff, and the gorget-like mark indicated by a few small spots of brownish black.

The Plate represents a male and a female, of the size of life.

EMBERIZA RUSTICA. *Pall.*

J.Gould & H.C.Richter del. et lith. Walter Imp.

# EMBERIZA RUSTICA, *Pall.*

## Rustic Bunting.

*Emberiza rustica*, Pall. Itin., tom. iii. App. no. 21.—Id. Zoog. Ross.-Asiat., tom. ii. p. 43.—Lath. Ind. Orn., vol. i. p. 413.—Shaw, Gen. Zool., vol. ix. p. 390.—Temm. Man. d'Orn., tom. iii. p. 229.—Gould, Birds of Eur., vol. iii. pl. 177.—Schleg. Rev. Crit. des Ois. d'Eur., p. lxxi.—Sieb. Temm. et Schleg. Faun. Jap., p. 97, tab. lviii.—Gray, Gen. of Birds, vol. ii. p. 377, *Emberiza*, sp. 6.—Kittl. Kupf. Nat. Vög., tab. 22. fig. 2.—Bonap. Consp. Gen. Av., tom. i. p. 466, *Emberiza*, sp. 21.—Swinh. Proc. of Zool. Soc., 1863, pp. 301, 337.—Id. Ibis, 1861, p. 255.—Blak. Ibis, 1862, p. 328.—Whitely, Ibis, 1867, p. 202.

——— *lesbia*, Gmel. edit. Linn. Syst. Nat., tom. i. p. 871.—Temm. Man. d'Orn., tom. i. p. 317.—Savi, Orn. Tosc., tom. iii. p. 223.

——— *borealis*, Zetterst. Resa i Lappm., vol. i. p. 107.

——— *Durazzi*, Bonap. Faun. Ital., tom. i. pl. 35. fig. 1?

*Rustic Bunting*, Lath. Gen. Syn. Supp., vol. ii. p. 201.—Id. Gen. Hist., vol. v. p. 325.

*Le Mitilène de Provence*, Buff. Hist. Nat. des Ois., tom. ix. p. 322.—Id. Pl. Enl., 656. fig. 2.

*Hypocentor rustica*, Cab. Mus. Hein., Theil i. p. 131, note.

---

The principal habitats of this Bunting are North China, Amoorland, and Japan, from all of which countries I have seen specimens. During the last few years solitary individuals have, like many other eastern birds, wandered from their natural homes, and been observed and captured in other countries, among them Heligoland, and one in this country. In my opinion, it is quite impossible for the most astute ornithologist to account for this distant wandering, instances of which may have before occurred; but we have no record of its having been found in England, nor any mounted specimens in our preserved collections to testify that such has been the case, until the year 1867, when a fine female was captured near Brighton, on the 23rd of October, and is now in the possession of T. J. Monk, Esq., of Mountfield House, Lewes. This occurrence of the bird in Sussex was made known to us by George Dawson Rowley, Esq., of Brighton, a gentleman than whom no one has a greater love for natural history, and whose judgment is unsurpassed in discriminating any new comer that may arrive among us. It will be in the recollection of ornithologists that Mr. Rowley was the first to call their attention to the occurrence of the *Emberiza pusilla* in the neighbourhood of Brighton, the specimen there taken being exhibited at the meeting of the Zoological Society on the 8th of November, 1864, and that he also made us aware of three instances of *Anthus campestris* having been captured in the same favoured locality. It is very pleasing to have a gentleman among us so ardently interested in the productions of nature, and, with the zeal of a true naturalist, paying equal attention to a living Bunting and the eggs of the extinct *Dinornis*, of which the most perfect example yet discovered graces his fine collection.

The facts connected with the capture of the *Emberiza rustica* in Sussex, as furnished to me by Mr. Rowley, are briefly these:—"On the afternoon of October 23rd, 1867, Mr. Swaysland, of Queen's Road, sent me a bird alive, just caught near Brighton. I examined it then, and next morning at his house, and I pointed out to him that it was a specimen of the *Emberiza rustica* of Pallas. Mr. Monk subsequently purchased the bird."

Latham states that this species inhabits the willow-beds of Dauuria, and is there most frequently met with in March; Gatke informs us that it occasionally visits Heligoland; and Mr. Swinhoe, in his 'Notes on the Birds observed about Talien Bay, in North China, from June 21 to July 25, 1860,' says, "I frequently met with this Bunting, which appeared to be the only species. Its choice habitats were the grass-covered sides of hills, where several together might be seen searching about on the ground for small seeds and insects. Occasionally flitting on the top of a rock, a male would continue to pour out a flow of rich notes, wild in their strain, but sweet and melodious. Its twittering call-note is not unlike that of the *Robin*. . . . . I have not yet met with the bird in Southern China."

Mr. Henry Whitely, who shot specimens at Hakodadi, in Japan, in the month of October, informs us that the bill is reddish brown, the irides dark hazel, and the legs and toes brownish flesh-colour.

The male has the lores, sides of the head, and ear-coverts blackish brown; posterior to the ear-coverts, within the black, a spot of dull greyish white; above the eye, from the bill to the nape, a broad streak of white in some specimens, and buffy white in others; above this a stripe nearly black, leaving the centre of the crown brown; throat white, with a moustache-like mark from the angle of the lower mandible, formed of dark brown feathers, bordered with buffy white; nape and gorget across the breast rich chestnut-red, each feather with a paler margin; feathers of the centre of the back brownish black, margined with tawny;

rump and upper tail-coverts chestnut-red, edged with tawny; greater and lesser wing-coverts brownish black margined externally with tawny and tipped with buffy white; primaries and most of the secondaries brown, narrowly edged with tawny; the last three or four secondaries, nearest the body, conspicuously margined with tawny; under surface white, with the exception of the centres of the flank feathers, which are chestnut-red; tail dark brown, the centre feathers edged with tawny; a broad longitudinal oblique stripe of white down the centre of the external feather, and a narrower one down the next on each side.

In the female the general arrangement of the colouring of the body is very similar, but much paler; the flank-marks extend further down the sides; and the ear-coverts and the black above the superciliary mark are much less deep.

The Plate represents a male and a female, of the size of life.

11
Bd 35

GLYCISPINA HUTTONI.

J.Gould & H.C.Richter del. et lith.

Walter Imp.

# GLYCYSPINA HUTTONI.

## Hutton's Bunting.

*Euspiza Huttoni*, Blyth, Journ. Asiat. Soc. Beng., vol. xviii. p. 811.
*Emberiza Buchanani*, Blyth, Journ. Asiat. Soc. Beng., vol. xvi. p. 780.
——— *Huttoni*, Horsf. and Moore, Cat. of Birds in Mus. East-Ind. Comp., vol. ii. p. 485.—Jerd. Birds of India, vol. ii. part i. p. 373.—Blyth, Ibis, 1867, p. 42.—Blanf. Ibis, 1867, p. 463.
——— *hortulana*, Sykes in Proc. of Comm. of Sci. and Corr. of Zool. Soc., part ii. 1832, p. 93?

---

Very little more is known respecting this very distinct species of Bunting than that it is a native of the Deccan and the north-western provinces of India. There is but little doubt, in my mind, that the "*Emberiza hortulana*, Red-brown Bunting," of Colonel Sykes's Catalogue above referred to is the same bird, notwithstanding his remark that "although not absolutely identical, it is so nearly allied to the European bird that he cannot separate it." I need scarcely tell ornithologists that the *Glycyspina hortulana* is not found in India (or, if it be, it is in the extreme north-western provinces only, and not in the Deccan), and that it inhabits more western countries, such as Persia, Asia Minor, and Europe. The two birds *Glycyspina Huttoni* and *G. hortulana* both belong to the same subgenus, to which also must be added *G. cæsia*. Mr. Blyth has the merit of being the first to discriminate and name the Indian bird, and of dedicating it, very appropriately, to Captain Hutton, a gentleman who has devoted much time to, and published many valuable memoirs on, the zoology of India. My own collection contains three very fine examples, two of which were kindly presented to me by Captain Burgess, another devotee to the zoology of the same country, who tells me that they were shot at Kouteel, from a flock flying about the edges of the Jowarree fields. Messrs. Horsfield and Moore, quoting Mr. Griffiths's MS., say:—"Found in flocks near shingly or stony hills," in winter. Captain Hutton met with it at Candahar, in summer; and Mr. W. T. Blanford "killed four specimens—two at Nagpore, and two west of Chanda." The following quotation is taken from Mr. Jerdon's standard work 'The Birds of India,' vol. ii. part i. p. 373.

"From the N. W. Himalayas. . . . Nearly allied to *Emberiza hortulana*, but differing in colour, having the head, neck, throat, and interscapularies greyish, without marks, but a few traces of striation on the lower part of the back; orbital feathers whitish; scapularies, fore part of the wings and margins of the coverts and tertiaries of the same pale rufous buff as the entire lower parts, from the breast inclusive, which is similar to that of the abdominal region only of *E. hortulana*."

These remarks, with the assistance of the accompanying Plate, will be sufficient to identify the species.

Col. Sykes states that it is a solitary bird, and that grass-seeds only were found in the stomachs of those he dissected. Like most other Buntings, its irides are dark brown, the legs and feet fleshy brown, while the bill is similar in colour to the breast.

The figures are supposed to represent a male and a female, of the natural size.

EUSPIZA ELEGANS, *Temm.*

J.Gould & W.Hart, del. et lith.

Walter Imp.

# EUSPIZA ELEGANS, *Temm.*

## Elegant Bunting.

*Emberiza elegans*, Temm. Pl. Col. p. 583.—Id. & Schlegel, Faun. Japonica, Aves, pl. 55.—Gray, Gen. B. ii. p. 377.—Bonap. Consp. Av. i. p. 464.—Radde, Reisen im Süd. v. Ost-Sibir. ii. p. 165, pl. 5.—Przew. Voy. Ussuri, no. 49.—Swinh. Proc. Zool. Soc. 1871, p. 388.—David, Nouv. Arch. Mus. Bull. vii. no. 299.—Dybowski, Journ. für Orn. 1875, p. 253.—Taczanowski, Bull. Soc. Zool. France, i. p. 176.—David & Oustalet, Ois. de la Chine, p. 322.—Blakiston & Pryer, Ibis, 1878, p. 242.

*Citrinella elegans*, Gray, Hand-list of Birds, ii. p. 113, no. 7685.

---

This little Bunting well deserves its name of *elegans*; for it is one of the prettiest and most graceful of all the group. It was originally described from Japan; but it is doubtful whether it is as plentiful there as in some parts of Eastern Siberia, as Messrs. Blakiston and Pryer, in their Catalogue of the Birds of Japan, do not seem to regard it as common: the native name is given by these gentlemen as "Miyama-hojiro." In Siberia the nest and eggs were found by Dr. Radde in the Bureja Mountains; and Dr. Taczanowski records that many specimens have been obtained by Dybowski near the mouth of the Ussuri and near the Bay of Abek.

"This pretty species," writes Père David, "first recorded from Japan, is also met with in Eastern Siberia and the Chinese empire. It passes regularly by Pekin, where the inhabitants call it by the name of 'Hoang-méy' (yellow-eyebrow), and look after it for the sake of the beauty of its *song*. I have found it commonly in the mountains of the western provinces, even as far as Pekin; and I was able to remark that it made its nest, like the Ortolans, under the stones or under low scrub."

The figures in the Plate are those of two males and a female, of the size of life.

EUSPIZA MELANOCEPHALA.

Walter Imp.

J.Gould & H.C.Richter, del. et lith.

# EUSPIZA MELANOCEPHALA.

## Black-headed Bunting.

*Emberiza melanocephala*, Scop. Ann. Nat. Hist., tom. i. p. 142.—Sykes, Proc. of Comm. of Sci. and Corr. of Zool. Soc., part ii., 1832, p. 93.—Jerd. Madras Journ. of Lit. and Sci., vol. xi. p. 29.—Blyth, Journ. of Asiat. Soc. Beng., vol. xiii. p. 957.—Burg. Proc. of Zool. Soc, part xxii., 1854, p. 160.—Bree, Hist. of Birds of Eur. not obs. in Brit. Isles, vol. iii. p. 24, and pl.

*Tanagra melanictera*, Lath. Ind. Orn., vol. i. p. 123.—Güld. Nov. Comm. Petrop., tom. xix. p. 465, tabs. 13, 14.

*Xanthornus Caucasicus*, Pall. Zoog. Rosso-Asiat., tom. i. p. 428. no. 74.

*Fringilla crocea*, Vieill. Hist. Nat. des Ois. Chant., p. 51, tab. 27.

*Passerina melanocephala*, Vieill. Encyc. Méth. Orn., part iii. p. 940.

*Emberiza granativora*, Ménétr. Cat. des Objets de Zool. du Caucase, tom. i. p. 40. no. 99.

*Euspiza melanocephala*, Bonap. Consp. Gen. Av., tom. i. p. 468, *Euspiza*, sp. 1.—Tristr. Proc. Zool. Soc., 1864, p. 446.—Id. Ibis, 1867, p. 368.—Jerd. Birds of Ind., vol. ii. part i. p. 378.

——— *simillima*, Blyth, Journ. Asiat. Soc. Beng., vol. xxiii. p. 811.—Id. Cat. of Birds in Mus. Asiat. Soc. Calc., p. 128.—Horsf. & Moore, Cat. of Birds in Mus. East-Ind. Comp., vol. ii. p. 486.

*Granativora simillima*, Bonap. Compt. Rend. de l'Acad. Sci., 1853.

---

Widely spread, indeed, is this fine and showy species of Bunting; for, although a native of Western India, it is especially abundant in Asia Minor, Greece, Italy, and other parts of Southern Europe, and we know that it has even been killed in England; for I have at this moment before me a female specimen that was shot by Mr. Robert Brazener in the neighbourhood of Brighton, as recorded by me in 'The Ibis' for 1869, p. 128. This individual is now the property of T. J. Monk, Esq., of Mountfield House, Lewes, the proprietor of many of the *raræ aves* which have made Sussex so famous in the eyes of British ornithologists. Having said thus much, I shall now proceed to give the details which have been published by those who have had opportunities of observing the bird in a state of nature, a privilege I have not myself enjoyed; and, in a work on the Birds of Asia, I naturally commence with Mr. Jerdon.

"In India," says this gentleman, "the Black-headed Bunting is only found in the North-western Provinces, where it is most abundant in the Deccan, and thence extends into the Upper Provinces of Hindustan. It usually makes its appearance in the Deccan about the end of November, in immense flocks, which are very destructive to the crops of jowaree and other grains. It leaves early in March, and certainly does *not* breed in any part of India."

The Rev. H. B. Tristram, in his "Notes on the Ornithology of Palestine," states that it is there a very common and conspicuous bird in spring and summer, and says:—"On reference to my note-book, I find I did not observe it before the first week in May; and its plumage is too brilliant for it easily to escape notice. Its note is varied and powerful, more like a Linnet's than a Bunting's; and it resorts to scrub, forests, and cultivated ground, affecting particularly olive-yards and, in the north, apricot-orchards, where it sits pouring forth its song from the topmost twig of some tall tree. The nest is placed either on the ground, in a tuft, or in a low bush, sometimes in the clump at the root of a shrub; it is more compact than that of most Buntings, lined with fibres of roots and hair; and the eggs, often six in number, are of a pale blue, powdered all over their surface, sometimes thickly, at others sparsely, with brown spots."

Dr. Bree, speaking of the bird in his valuable contribution to ornithological literature, 'A History of the Birds of Europe not observed in the British Isles,' says:—

"The Black-headed Bunting is an inhabitant of the southern parts of Europe and Asia Minor. It inhabits the Caucasus, and is very common in Georgia, about Tiflis, and in Greece, and is not rare in Dalmatia. It is common throughout the Levant, and is sufficiently so, according to Temminck, in Istria, in the neighbourhood of Trieste, in the bushes and slopes of the hills which border the Adriatic. It has occasionally, but accidentally, been found in Lombardy, Provence, Saxony, and, in Germany, in the neighbourhood of Vienna.

"It sings very agreeably, preferring, while so engaged, to perch on some post in the open country.

"It nests upon shrubs, particularly, according to Degland, on 'the *Bariurus aculeatus*, and not far from the ground. It lays from four to five whitish eggs, covered with very small spots and dots of a more or less ashy grey; some specimens are of greenish white, with spots of a rust-brown at the largest end.'

"Count Mühle says it comes into Greece at the end of April. On a clear bright morning in spring, the

hedges near the coast are often covered with them, though previously none were to be seen. It builds and breeds in the over-grown hills, and goes away early in August. During the breeding-time, the male sits on the tops of the bushes, and continually utters its agreeable, simple, Yellowhammer-like song. It is not at all shy, and is frequently killed by those in quest of it with a stick alone. Singular to say, the female is seldom seen; I have met with a very small number of that sex."

Lord Lilford informs us in 'The Ibis' for 1860, p. 139, that the Black-headed Bunting "arrives in Corfu and Epirus in great numbers in April, remains to breed, and disappears in September, has an agreeable song, and is known in Corfu by the name of 'Ortolano.'"

Very considerable difference occurs in the colouring of the sexes—the female being destitute of the rich black colouring of the head, and of the chestnut hue of the back.

The male in full breeding-plumage has the head, cheeks, and ear-coverts rich deep black, all the upper surface and a patch on each side of the chest deep rust-red, the whole of the under surface and the sides of the neck bright yellow; wings reddish brown, each feather conspicuously margined with grey, except the primaries, on which it only occurs as a fine line on the extreme edge of the feathers; tail similar, but paler, and the edging not so decided; bill bluish grey; feet yellowish brown.

The general plumage of the female above is brown, each feather margined with pale brown; the under surface washed with yellow, which is deepest on the under tail-coverts.

The Plate represents the two sexes, of the natural size, on the wild hop (*Humulus Lupulus*, Linn.).

EUSPIZA LUTEOLA.

J.Gould. et H.C.Richter, del. et lith. Walter. Imp.

# EUSPIZA LUTEOLA.

## Red-headed Bunting.

*Emberiza luteola*, Sparrm. Mus. Carls., fasc. iv. tab. 93.
*Luteous Bunting*, Lath. Gen. Syn., supp., vol. ii. p. 203.—Id. Gen. Hist., vol. iv. p. 333.
*Euspiza luteola*, Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 128.—Bonap. Consp. Gen. Av., p. 469, *Euspiza*, sp. 6.—Cab. Mus. Hein. Theil i. p. 130.—Horsf. & Moore, Cat. of Birds in Mus. East-Ind. Comp., vol. ii. p. 486.—Jerd. Birds of Ind., vol. ii. part i. p. 378.
*Emberiza icterica*, Evers. Add. Pall. Zoog. Rosso-Asiat., tom. ii. tab. 10.—Blyth, Journ. Asiat. Soc. Beng., vol. xiii p. 957.—Hutt. Journ. Asiat. Soc. Beng., vol. xvi. p. 779.
*Euspiza icterica*, Gray & Mitch. Gen. of Birds, vol. ii. p. 376, pl. 91.
*Emberiza brunniceps*, Brandt, Bull. de l'Acad. Imp. de St. Pétersb.
——— *personata*, Blyth, Journ. Asiat. Soc. Beng., vol. xiv. p. 555.
*Loxia flavicans*, var. A, Lath. Gen. Hist., vol. v. p. 243.
*Gandam*, Hindoos of Central India.
*Dalchidi* of the Scindians.
*Pacha jinmoayi* of the Telugus.

---

This bird very closely assimilates in form and structure to the Black-headed Bunting (*Euspiza melanocephala*)—but not in the colouring of the head and throat, those parts being rich rusty red, instead of the former being black and the latter yellow; it is also somewhat smaller in size. Like its Black-headed ally, it is an inhabitant of the western portion of India, but is far less common. Although not a native of Asia Minor or Europe, it, according to the St.-Petersburg naturalists, ranges far to the north and north-eastward of Afghanistan, being one of the birds described by Eversmann in Pallas's 'Zoographia Rosso-Asiatica,' above referred to. I may state that I have compared Siberian specimens (sent to me by Dr. Hartlaub, of Bremen) with Indian examples forwarded by Capt. Burgess from the Deccan, and find they do not differ in any respect. With regard to the sexes, precisely the same variation occurs as in *Euspiza melanocephala*; the females of the two species, therefore, are very similar.

Of the habits and economy, as well as of the other parts of its history, but little has been recorded.

"The Red-headed Bunting," says Mr. Jerdon, "is locally distributed over various parts of India. Beginning from the south, I have seen it rarely in Coimbatore, in Mysore, Cuddapah, and the edges of the Eastern Ghâts. Mr. Elliott obtained it in abundance at Dharwar; I saw it near Nagpore, and tolerably numerous at Mhow and Saugor; but I never obtained it nor saw it, that I am aware of, among the thousands of *Euspiza melanocephala* that yearly visit the cornfields about Jalna. Mr. Blyth has received it from Central India and from the Upper Provinces; and it also occurs in Scinde and the Punjab during the harvest season, but never in the Himalayas. Out of India, it has been found in Afghanistan and other parts of Central Asia, but not in Western Asia nor in Europe. Like *E. melanocephala*, it is only a cold-weather visitant to India, but does not, in general, appear in such vast numbers as that species does in the Deccan; yet I have observed considerable flocks near Saugor, and seen them mated there. It prefers cultivated land, near to bush jungle, into which it can retreat during the middle of the day; it is also frequently seen about hedges.

"It appears to breed in Afghanistan; for Hutton says it arrives at Candahar in the beginning of April, and departs in autumn. Adams states that it has a sweet and melodious song; but Griffiths says 'the chirp of this bird is like that of the common Quail.'"

In the MS. notes kindly given to me by the late Major Boys, I find a record of his having shot examples of this species at Sultanpore, Ghazepore, and on the road to Shakapore, in Scinde, and also at Ferozepore, on the 30th of August, 1846.

The male has the head, neck, and breast rich orange-chestnut; back and scapularies greenish yellow, with a stripe of dark brown down the centre of each feather; rump and upper tail-coverts deep yellow; wings and tail brown; the wing-coverts broadly, and the primaries and tail-feathers narrowly, edged with very pale brown; sides of the neck and all the under surface rich yellow; bill light fleshy yellow; irides and legs brown.

The female is pale brown above, striated on the head with darker brown, has a wash of rufous on the rump and upper tail-coverts, all the under surface pale buffy yellow, and the wings and tail as in the male.

The Plate represents the two sexes, of the size of life, on a flowering branch of the wild crab tree.

PASSER AMMODENDRI, *Severzow.*

Tibbald & H. Richter del. et lith.

Walter Imp.

# PASSER AMMODENDRI, *Severtzow*.

## Turkestan Sparrow.

*Passer ammodendri*, Dode, in Proc. of Zool. Soc., 1871, pp. 480, 481.

---

The members of the genus *Passer* (of which our own *P. domesticus* may be considered a typical example, if not the veritable type of the form) are widely spread over various portions of the Old World. They amount to about fifteen in number, four of which inhabit Europe; as many or even more are indigenous in Africa; others occur in Asia Minor, Palestine, India, China, and Japan, to which modern research has recently added another very distinct and highly interesting species from Turkestan. The whole of them bear a very general resemblance in size; none are highly coloured or gaudy in their attire, but, generally speaking, the males are distinguished by conspicuous markings on the head and throat, which are absent in the females; some are peculiarly domestic in their habits, frequenting villages, towns, and great cities, while others resort to the open country, often in troops of hundreds, and roost on rocks, in woods, and great beds of reeds. On the whole they may be said to be a highly gregarious family of birds. Many persons believe that this form is found in America; but this is not the case, with the exception of *P. domesticus*, and that has been introduced; neither are any species found in Australia, New Zealand, or Polynesia.

In form and size the Sparrow of Turkestan assimilates closely to *P. domesticus*; but a glance at the accompanying Plate will convince the reader that it is very differently coloured, and of its specific value there can be no doubt. So little is known respecting it that the following brief note from the pen of M. Charles Dode, of St. Petersburg, published in the 'Proceedings of the Zoological Society of London' for 1871, above referred to, comprises all that, so far as I am aware, has been recorded:—

"Cette jolie espèce de passereau a été trouvée par M. Severtzow naturaliste Russe dans les montagnes Célestes sur des plateaux d'un accès difficile; les seules données qui m'aient été communiquées, c'est que pendant l'hiver qu'on se trouve, cet oiseau ne descend pas dans la plaine."

Like most, if not all, the other members of its genus, it is not migratory, and probably never leaves the high plateaux of its native country; otherwise collectors would surely have met with it in China, India, or the eastern portion of Europe.

The male has the crown of the head and back of the neck black, each feather margined with grey; line from the bill above the eye white; sides of the head cinnamon-brown; lores, a curved line behind the eye, and the chin and throat deep black; mantle greyish brown, striated with black; lesser wing-coverts black, largely tipped with white; greater coverts and secondaries black, margined with greyish white; spurious wing and primaries brown, becoming much darker towards their tips, and narrowly margined with grey; lower half of the back grey; tail blackish brown, narrowly edged with grey; under surface greyish white, with a faint wash of brown on the ear-coverts and flanks; bill black; feet flesh-colour.

The female has the head and upper surface grey, streaked with black; across the forehead and over each eye a greyish-white line; ear-coverts brown; under surface buffy white, with a small obscure patch of blackish brown on the throat.

The Plate represents the two sexes, of the size of life.

FRINGILLA BURTONI: *Gould.*

Hullmandel & Walton Imp.

J. Gould, del. et lith. H.C. Richter, del. et lith.

# FRINGILLA BURTONI, *Gould.*

## Burton's Grosbeak.

*Carduelis Burtoni*, Gould in Proc. of Zool. Soc., Part V. p. 90.
*Fringilla Burtoni*, Gray and Mitch. Gen. of Birds, vol. ii. p. 371, *Fringilla*, sp. 9.

---

I FIRST became acquainted with this fine species in the year 1837, while inspecting the collection at Fort Pitt, Chatham, which at that time contained the only known specimen: since that period a second example has come under my notice, in the Museum of the Yorkshire Philosophical Society; a third in the Museum of the University of Edinburgh; and I have lately been so fortunate as to obtain for my own collection two males and a female; and these six specimens are, I believe, all that are at present in Europe.

It will be perceived that I originally placed this bird in the genus *Carduelis*, with the remark, that "it departs in some respects from the other members of that genus, particularly in the robust form of the beak, which is slightly angulated at the base:" upon reconsideration of the subject, I am now of opinion that its proper situation is in the genus *Fringilla*, in which I have accordingly placed it.

The Fort Pitt specimen was said to be from the Himalayas, that at York from Simla; and Sir William Jardine informs me, that on a drawing of this species lately sent to him by Mr. Blyth, is inscribed, "From Huttoo Mountains, near Simla," which neighbourhood may therefore be considered its native habitat.

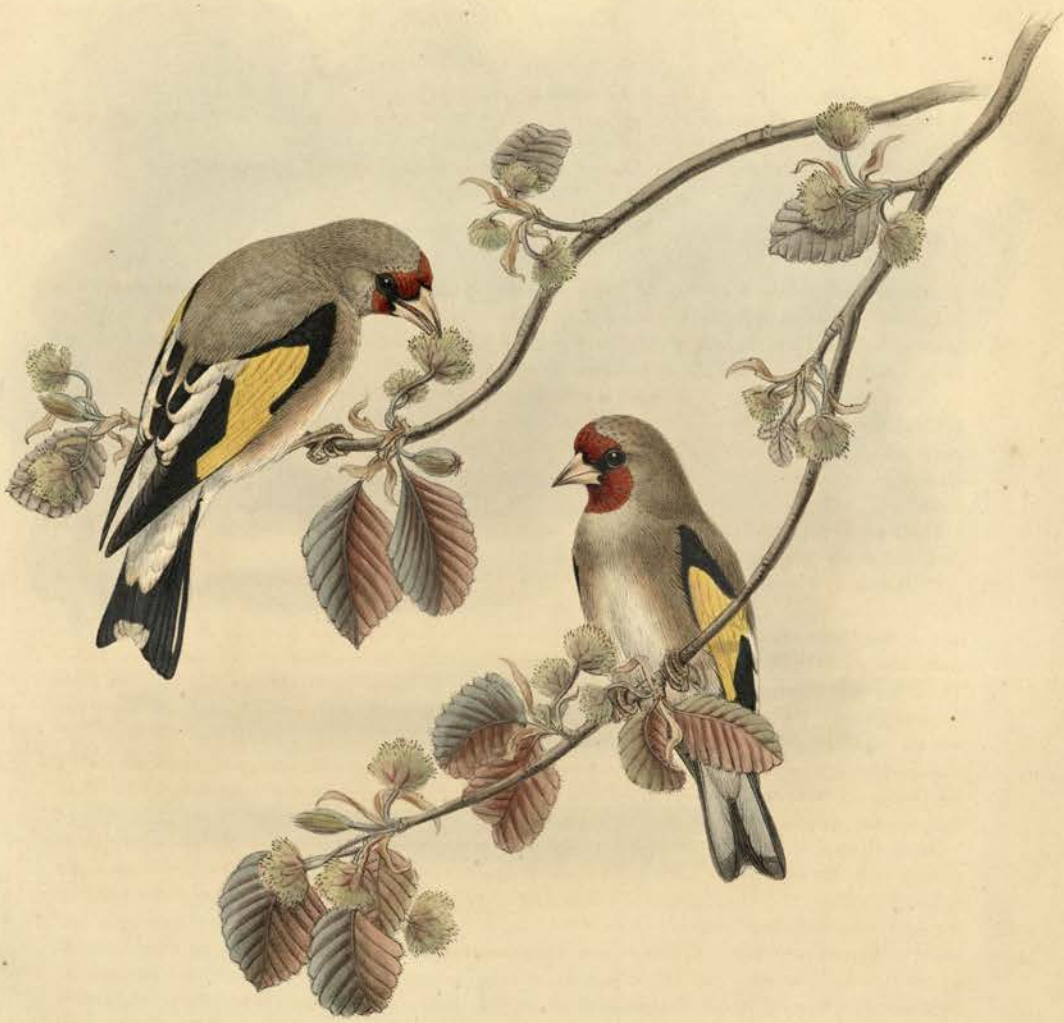
I was induced to give this fine bird the specific appellation *of Burtoni*, in order to pay a just compliment to Staff Surgeon Burton for the warm interest he took in the formation of the Fort Pitt collection, and for the readiness he has at all times evinced to aid in any way the advancement of zoological science.

The male has the forehead, lores, and a curved line over the eye bright vermilion; crown of the head and cheeks black; plumage of the body, both above and below, reddish brown; all the feathers of the breast and abdomen margined with red; wings black; spurious wing, greater coverts, secondaries and tertiaries more or less tipped with white; tail black and white, the white being of a V-shaped form and decreasing in extent until on the centre feathers it is nearly obsolete; bill yellowish brown; feet fleshy brown.

In another specimen, which appears to be a fresh moulted bird, the colours are altogether finer, brighter, and more decided; the vermilion advances upon the forehead and encircles the eye; the white marks on the wing are much larger, have a tinge of vermilion on their anterior margins, and show very conspicuously.

The female has the forehead and circle round the eye orange; crown of the head blackish brown; upper surface brown; under surface brown, slightly washed with orange; under tail-coverts buff; wings and tail as in the male, but the colours less decided.

The Plate represents two males and a female of the natural size.



CARDUELIS ORIENTALIS.

J. Gould & W. Hart del. et lith.

Walter Imp.

# CARDUELIS ORIENTALIS, *Vigors.*

## Eastern Goldfinch.

*Passer carduelis*, var., Pallas, Zoogr. Rosso-Asiat. ii. p. 16 (1811).
*Fringilla orientalis*, Eversmann, Addenda ad Pallas, Zoogr. Rosso-Asiat. fasc. ii. p. 9 (1841).—Gray, Hand-list of Birds, ii. p. 80 (1870).
*Carduelis orientalis*, Severtz. Turkest. Jevotnie, pp. 64, 116.—Dresser, Ibis, 1875, pp. 242, 387.

---

The birds which I have figured in the Plate are from Central Asia, and are evidently the true *orientalis* of Eversmann. I notice that Mr. Dresser and Dr. Severtzoff unite this species unhesitatingly to the Himalayan Goldfinch, *Carduelis caniceps*; but they seem to me to constitute, if not two species, at least two easily recognizable races, and I have refrained, therefore, from adding the extensive synonymy of *C. caniceps* to that of the present bird. *C. orientalis* is a larger and more powerful bird than *C. caniceps*, with a longer bill, and it is not so ruddy in colour, being of a more ashen and desert-like hue. I have beautiful full-plumaged specimens of each bird, and after comparing them carefully I think they may fairly be considered distinct, as, in addition to the smaller size of *C. caniceps*, the colour of its scarlet face is brighter and more vivid.

There can be little doubt that this is the bird considered by Pallas to be a variety of the common Goldfinch, and it was found by him in summer on the shores of the Yenisei River.

Of this Dr. Severtzoff very truly observes:—"This bird is not merely a climatic variety of the European Goldfinch, from which it differs in lacking the black markings on the head, the yellowish brown on the back and on the breast being replaced by grey. Both species inhabit the same localities in the Thian-Shan mountains; and the distinctive characters were constant in all of the hundreds of specimens I examined. The differences between *Passer salicarius* and *Passer domesticus* are also constant, although these two Sparrows frequently inhabit the same localities, and are found in the same flock; and they hold good not only in the autumn dress, but also in the full breeding-plumage."

Although specimens were contained in Captain T. Biddulph's Yarkand collections, it is not mentioned by Dr. Scully, our latest authority on the avifauna of this part of the world, nor was it procured by Dr. Henderson during his journey from Lahore to Yarkand.

*Adult.* General colour above ash-brown, rather mealy in appearance, the scapulars and least wing-coverts uniform with the back; primary and greater coverts jet-black, the latter bright golden yellow towards the tips of the latter; quills black, golden yellow for half of the outer webs, the innermost secondaries white on the outer web, decreasing gradually into a white spot on those nearer the middle of the wing; rump and upper tail-coverts pure white; tail black, with a large terminal spot of white, the two outer feathers nearly all white on the inner web, black only at base and at tip; forehead and fore part of cheeks and chin scarlet, the feathers in front of the eye blackish; ear-coverts and under surface of body light ashy brown, with a greyish shade on the chest; the throat, abdomen, and under tail-coverts whitish; under wing-coverts, axillaries, and inner lining of quills white, the small coverts near the edge of the wing dusky, tipped with dull whitish and slightly washed with yellow. Total length 5¼ inches, wing 3⅜, tail 3⅜.

The figures in the Plate are of the natural size, and are drawn from a pair of Turkestan birds in my own collection.

EOPHONA PERSONATA.

J. Gould and H. C. Richter del. et lith.

Hullmandel & Walton imp.

# EOPHONA PERSONATA.

## Masked Grosbeak.

*Coccothraustes personatus*, Temm. and Schlegel, Fauna Jap. Aves, p. 91. tab. lii.
*Hesperiphona personata*, Bonap. Consp. Gen. Av., p. 506.

---

On the accompanying Plate I have given a representation of a species of Grosbeak, which is more than usually interesting, inasmuch as it is one of the finest members of its family, and, moreover, the inhabitant of countries with the natural history of which we are but imperfectly acquainted, viz. China and Japan. A specimen of the female in the rich collection of the Earl of Derby is said to be from Manilla; if such should really be the case, the range of the species is very extensive: I have not, however, as yet seen any examples from India proper. The bird is well figured in Messrs. Temminck and Schlegel's "Fauna Japonica," but no account whatever is given of its habits, nor have they even mentioned the localities in which it was found.

I believe that a seasonal change of colour takes place in the bill of this species, as well as in that of *Eophona melanura*; as the example above referred to in the Earl of Derby's collection exhibits a deep purple colouring around the base and at the tip. A considerable difference occurs in the colouring of the sexes; the black of the face and head, so conspicuous in the male, being entirely wanting in the female.

The time is not I hope far distant when this fine species will be added to the aviaries of Europe; it would doubtless bear confinement equally as well as any other member of the numerous family to which it belongs, and I shall be gratified to learn that its introduction has been successfully achieved by some of the now frequent visitors to China.

Crown of the head, lores, and a broad band encircling the base of the bill black, with steel-blue reflections; upper and under surface brownish grey, passing into a deeper tint of brown on the scapularies and lower part of the back, and into white immediately before the black of the head and face; wings and tail black, with steel-blue reflections; at the base of the primaries a broad band of white; bill bright citron-yellow; legs and feet yellow, washed with brown, especially on the nails; irides reddish hazel.

The female has the general plumage brown, with a wash of grey on the breast, and the primaries and tail dull black.

The Plate represents two males and a female of the natural size.

EDOLIONA MELANURA.

J. Gould and H.C. Richter del. et lith.

Hullmandel & Walton imp.

# EOPHONA MELANURA.

## Black-tailed Grosbeak.

*Le Gros-bec de la Chine*, Sonn. Voy., tom. ii. p. 199.
*Loxia melanura*, Gmel. Edit. Linn. Syst. Nat., tom. i. p. 853.—Lath. Ind. Orn., vol. i. p. 389.—Daud. Orn., tom. ii. p. 385.—Shaw, Gen. Zool., vol. ix. p. 312.
*Grey-necked Grosbeak*, Lath. Gen. Syn., vol. iii. p. 145.—Ib. Gen. Hist., vol. v. p. 250.
*Coccothraustes melanura*, Jard. and Selb. Ill. Orn., vol. ii. pl. 63.
——— *melanurus*, Gray and Mitch. Gen. of Birds, vol. ii. p. 358, *Coccothraustes*, sp. 2.
*Hesperiphona melanura*, Bonap. Consp. Gen. Av., p. 506.

---

It cannot be said that this bird represents our common Grosbeak in China, inasmuch as the two birds not only inhabit the same country, but are even found in the same districts; they differ much in external appearance, and it is probable that when the present bird becomes as well known as the European species, there will be found as great a difference in their habits. In a collection of birds obligingly lent me by J. R. Reeves, Esq., there are fine examples of this species, which had been procured in the neighbourhood of Shanghai: Sir William Jardine gives the neighbourhood of Canton as a locality from which he had received specimens; and I have also others from the island of Chusan; it is evident, therefore, that its range extends over all those parts of China best known to Europeans. On a label attached to one of Mr. Reeves' specimens, it is stated that the crop was filled with grain and a small admixture of gravel.

A very considerable difference is found to exist in the colouring of the bills of different individuals, some having that organ of a rich orange-yellow, and others of the same hue clouded at the base and tip with slaty purple, a colour which appears to pervade the whole of the bill during the breeding-season.

Head, cheeks and throat deep black, with steel-blue reflections; back wood-brown, fading into greyish brown on the back of the neck, and nearly pure grey on the rump and upper tail-coverts; wings black, the greater coverts with steel-blue reflections; spurious wing tipped with white; the first, second, third and fourth primaries largely tipped with white, the fifth tipped with white for half an inch from the point, the sixth tipped with white for an eighth of an inch, the seventh, eighth and ninth with a narrow line of white across the tip; secondaries largely tipped with white; tail deep black, with steel-blue reflections; lower part of the neck and breast dull grey; abdomen and flanks buff, washed with chestnut; vent and under tail-coverts buffy white; bill fine yellow; irides red; legs pale pink.

The female has the general plumage greyish brown; wings very dark brown, the primaries margined externally at the tip with white, and the secondaries tipped with white; two central tail-feathers grey, tipped with dull black; lateral feathers very dark brown.

The Plate represents two males and a female of the natural size.

MYCEROBAS MELANOXANTHUS.

# MYCEROBAS MELANOXANTHUS.

## Black and Yellow Grosbeak.

*Coccothraustes melanozanthos*, Hodgs. Asiat. Research., vol. xix. p. 150.—Ib. Journ. Asiat. Soc. Beng., vol. xiii. part ii. p. 950. pl. fig. 3, bill.

——— *melanoxanthus*, Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 125.—Cat. of Spec. and Draw. of Mamm. and Birds presented to Brit. Mus. by B. H. Hodgson, Esq., p. 105.—Gray and Mitch. Gen. of Birds, vol. ii. p. 358, *Coccothraustes*, sp. 5.

——— *fortirostris*, Lafr.

*Mycerobas melanoxanthus*, Bonap. Consp. Gen. Av., p. 505.

---

Mr. Hodgson states that the true habitat of the Black and Yellow Grosbeak is the northern regions of India, but that in summer it wanders from thence into its central portions in search of the ripe stony fruits and berries which constitute its principal food, and for crushing which its enormously developed and powerful mandibles seem admirably adapted. A female or young bird is figured among the drawings of the late Hon. F. J. Shore, from a specimen killed by him on the 17th of March 1828, a little above Najpoor.

The male has the head, neck, throat, breast, upper surface, wings and tail sooty black; the third, fourth, fifth and sixth primaries with a mark of snow-white at the base, the scapularies with a large oblong mark of yellowish white near the tip of their outer webs, the secondaries and all but the first four primaries with a small narrow mark of the same colour near the tip of their outer webs; abdomen and under tail-coverts yellow; thighs mottled black and yellow; bill purplish horn-colour; feet purplish brown.

The female has the upper surface dull black, mottled with yellow over the head, back of the neck and down the centre of the back; wings similar to those of the male, but the coverts also bordered with yellowish white; rump and upper tail-coverts narrowly bordered with olive; under surface yellow, each feather with a tear-shaped mark of black down the centre, these marks becoming longer and more conspicuous on the flanks.

I am not quite certain that the fully adult female does not lose the spotted markings of the breast; the changes probably resembling those which take place in the Greenfinch (*Fringilla chloris*, Linn.) of Europe.

In some specimens the yellow is so pale as to be almost white.

The young are said to resemble the female until the second moult, and then gradually to assume the adult plumage.

The figures represent birds in the three states above described of the natural size.

MYCEROBAS CARNIPES.

# MYCEROBAS CARNIPES.

## Flesh-footed Grosbeak.

*Coccothraustes carnipes*, Hodgs. Asiat. Researcb., vol. xix. p. 151.—Journ. Asiat. Soc. Beng., vol. xiii. part ii. p. 950. pl. . fig. 4. bill.—Gray and Mitch. Gen. of Birds, vol. ii. p. 358, *Coccothraustes*, sp. 7.—Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 125.—Cat. of Spec. and Draw. of Mamm. and Birds presented to Brit. Mus. by B. H. Hodgson, Esq., p. 105.

——————— *speculigerus*, Brandt, Bull. Sci. de l'Acad. Imp. des Sci. de St. Pétersb., tom. ix. p. 11.

*Hesperiphona speculigerus*, Bonap. Consp. Gen. Av., p. 506.

*Coccothraustes albispecularis*, Mercatorum, Bonap.

---

I FIND that great care is required in order to ascertain the identity or non-identity of species described by naturalists on the opposite sides of the great Himalaya range, and also to determine with certainty which of the names given by them to the same species has the priority; thus the *Coccothraustes carnipes* of Mr. Hodgson and the *C. speculigerus* of M. Brandt have been considered to be distinct species, but I find that both names have reference to one and the same bird; and that the term *carnipes* having been given by Mr. Hodgson two or three years prior to that of *speculigerus*, it is necessarily the one to be adopted, although the latter is the name by which the bird is more generally known. An example of this species is now before me, from the Indian collection of Andrew Murray, Esq., of Aberdeen; I have also examined the specimens presented to the British Museum by B. H. Hodgson, Esq., and I find them to be precisely identical with the fine examples lent to me by Dr. Hartlaub from the Museum at Bremen, and a specimen belonging to H. E. Strickland, Esq., all of which had been procured near Semipalatinsk on the Altai. In form this species is precisely similar to that of *M. melanoxanthus*, and consequently it must be placed in *M. Cabanis*, genus *Mycerobas*, and not in that of *Hesperiphona*, to which it has been assigned by the Prince of Canino.

The male has the head, neck, back, throat, breast and tail sooty black; rump, abdomen and under tail-coverts dull wax-yellow; upper tail-coverts black, margined with dull wax-yellow; wings greyish black; primaries white at the base, and narrowly margined with greyish white; tips of the greater coverts dull wax-yellow; tertiaries with a large oblong mark of dull wax-yellow on the extremity of their outer webs, fading into whitish on the tip of the inner web; bill fleshy brown, becoming darker at the tip; feet fleshy brown.

The female has the ear-coverts black, streaked with greyish white; head, neck, breast and upper part of the back dark grey; remainder of the plumage as in the male, except that the colours are not so bright, that the upper tail-coverts are olive-yellow, and the tail-feathers narrowly edged with the same hue.

The Plate represents the two sexes of the natural size, figured from the fine specimens belonging to the Museum at Bremen.

HESPERIPHONA ICTERIOÏDES.

J. Gould and H. C. Richter del. et lith.

Hullmandel & Walton Imp.

# HESPERIPHONA ICTERIOÏDES.

## Icterine Grosbeak.

*Coccothraustes Icterioïdes*, Vig. in Proc. of Comm. of Sci. and Corr. Zool. Soc., part i. p. 8.—Gould, Century of Birds, pl. 45.—Cat. of Spec. and Draw. of Mamm. and Birds presented to Brit. Mus. by B. H. Hodgson, Esq., p. 105.—Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 125.—Gray and Mitch. Gen. of Birds, vol. ii. p. 358, *Coccothraustes*, sp. 4.—Hodgs. Journ. Asiat. Soc. Beng., vol. xiii. pt. ii. p. 950. pl. fig. 5.
*Hesperiphona icteroides*, Bonap. Consp. Gen. Av., p. 505.

---

When this species was described by the late Mr. Vigors in the Proceedings of the Zoological Society for 1831, examples were so rarely to be met with, that those from which his characters were taken were almost the only ones known; since that period its native habitat having been more frequently visited by Europeans, specimens are now to be seen in every collection. It may be regarded as one of the most beautiful members of its family, and one in every way worthy of introduction to our aviaries: I believe it to be strictly confined to the hilly districts of Upper India, and more especially to the north-eastern portion of the Himalayas, wherever thick woods, in which it loves to dwell, occur. Its habits, like those of the other members of the genus, are shy and retiring, and like them, it feeds upon the smaller stone fruits so abundant in the localities it frequents.

In the male, the head, neck, wings, tail and thighs are black; the remainder of the plumage rich yellow; bill pea-green, passing into yellow on the edges of the mandibles; feet flesh-colour.

The young male has the head and neck grey; the upper surface olive-green; under surface olive-yellow; the primaries and tail black.

The female has the head and general plumage grey, passing into buff on the rump, the upper and the under tail-coverts; primaries and tail dull black, with the exception of the two middle tail-feathers, which are greyish.

The Plate represents an adult male, a young male, and a female of the natural size.

HESPERIPHONA AFFINIS Pl. 1

J. Gould & H.C. Richter del. et lith.

Walter Imp.

# HESPERIPHONA AFFINIS, *Blyth.*

## Allied Grosbeak.

*Hesperiphona affinis*, Blyth, Journ. Asiat. Soc. Beng., vol. xxiv. p. 179.—Jerd. Birds of Ind., vol. ii. part 1, p. 385.

---

This species is closely allied to, but yet very distinct from, the *Hesperiphona icterioïdes*. The male may at all times be distinguished by its yellow thighs, and the female by its grey head and throat, which offer a striking contrast to the dull wax-yellow of the body. Captain Pinwill has remarked that I have associated this sex with the male of *H. icterioïdes*; and I believe he is right as regards the front figure, but not the hinder one, which represents the true female of *H. icterioïdes*. It is somewhat strange, although extremely interesting, that so marked a difference should be found in the females of these nearly allied birds; but so it really is. The female of *H. affinis*, as before stated, has a distinct broad and wax-yellow body; while the same sex in *H. icterioïdes* has the abdomen, tail-coverts, and rump buff, whereas the other parts of the body, including the thighs, are grey. Captain Pinwill states, in a letter to me, that the present bird seems common enough near the Chumba district of the Himalayas, frequenting the forests of evergreen oaks, and the softer-fruited pines, the cones of which latter it destroys in great numbers, like its congener *H. icterioïdes*.

Mr. Jerdon informs us that "this is a somewhat smaller species than the *H. icterioïdes*, with a slightly smaller bill; the males of the two resemble each other very closely; but the females are more distinct, that of the present having the upper parts olive-green, tinged with yellowish on the rump, and more brightly so on the lower plumage; the wings and tail are black; the coverts, secondaries, and tertiaries broadly margined externally with yellowish green; the crown and ear-coverts ashy, passing into pale grey on the chin and throat; bill bluish in winter, yellow in summer.

"Hitherto this bird has been sent from the extreme west, viz. the Alpine Punjab."

In closing this somewhat meagre account of a very fine species of Grosbeak, I may state that my specimens have the yellow on the nape and rump very strongly suffused with chestnut, and that in other respects, particularly in their rather smaller size, they accord with Mr. Jerdon's remarks. That it is the western representative of the more eastern *H. icterioïdes*, there can be no doubt. Time will show if there be yet a third species to the eastward of our Indian possessions, as is the case with so many other birds inhabiting the great range of mountains known as the Himalayas.

*Male.*—Bill delicate greenish yellow; head, throat, sides of the mantle, wings, and tail rich black; all the rest of the plumage, including the thighs, yellow, the yellow being strongly tinged with chestnut in some specimens.

*Female.*—Bill bluish horn-colour; head and throat grey; wings and tail black; the rest of the plumage brimstone-yellow, which is brightest on the nape and under surface.

The Plate represents a male and a female, of the size of life.

HÆMATOSPIZA SIPAHI.

J. Gould and H.C. Richter, del. et lith.

Hullmandel & Walton, Imp.

# HÆMATOSPIZA SIPAHI.

## Sepoy Finch.

*Corythus Sipahi*, Hodgs. As. Res., vol. xix. p. 151.
*Propyrrhula Sipahi*, Hodgs. in Gray's Zool. Misc., p. 85.
*Hæmatospiza Boetonensis*, Blyth, Journ. As. Soc. Beng. 1844, p. 951. pl. fig. 9.
——— *Sipahi*, Bonap. et Schlegel, Mon. des Loxiens, p. 33. pls. 39, 40.—Bonap. Consp. Gen. Av. p. 526.
*Loxia Indica*, Gmel. ?
—— *fulgens*, Less. Traité d'Orn., p. 447, *Coccothraustes*, sp. 7 ?
*Pitylus coccineus*, Cuv. ?
*Hæmatospiza boetonensis* ?, Blyth Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 122.

---

In many parts of its structure, as well as in its general colouring, this bird offers a close alliance to the members of the genus *Corythus*, yet every ornithologist will perceive that it differs from that form, and will agree that Mr. Hodgson has very properly made it the type of a new genus, *Hæmatospiza*. It is not only the most highly coloured species of the family *Loxiadæ*, but its plumage is perhaps more intensely scarlet-red than any other at present known; and in its native woods it must be a most attractive and brilliant object, especially if, like its near allies, it be gregarious, and many males may be seen on the same tree at one time. But little information has been recorded respecting this species. It is said to have been received from Darjeeling and the Himalaya, and in all probability the rich country of Nepaul is its native habitat, as it is from thence that specimens have been most frequently brought to this country. Mr. Blyth states, that living examples are occasionally brought to Calcutta for sale; and the Prince of Canino and Dr. Schlegel inform us, in their "Monographie des Loxiens," that it sings very agreeably, and plays a great part in the mythology of the Indians.

The sexes, as will be seen, present a strong contrast to each other.

The male has the entire plumage intense scarlet-red, with the exception of the inner webs of the wing-feathers and the tail, which are black; irides yellowish brown; bill yellowish horn-colour; legs and feet brown.

The female has the feathers of the head, back and wing-coverts dark brown, broadly margined with yellowish olive; rump rich orange; primaries and tail brownish black, the former margined externally at the base with yellowish olive; tail-coverts brownish black, margined with yellowish olive; feathers of the under surface dark brown at the base, broadly margined with greyish olive; bill browner than in the male.

The Plate represents the two sexes of the natural size.

CARPODACUS RUBICILLA.

J. Gould and H.C. Richter del. et lith.

Hullmandel & Walton Imp.

# CARPODACUS RUBICILLA.

## Caucasian Grosbeak.

*Loxia rubicilla*, Güld. Nov. Comm. Petrop., tom. xix. p. 464. pl. 12.—Gmel. Edit. Linn. Syst. Nat., tom. i. p. 846.—Lath. Ind. Orn., tom. i. p. 372.—Daud. Orn., tom. ii. p. 387.—Shaw, Gen. Zool., vol. ix. p. 245.

*Coccothraustes Caucasicus*, Pall. Zoog., tom. ii. p. 13. No. 183.

*Pyrrhula (Corythus) Caucasica*, Keys. und Blas. Wirb. Europ., pp. xl. et 158.

*Carpodacus rubicilla*, Bonap. et Schlegel, Mon. des Loxiens, p. 23. pl. 26.—Bonap. Consp. Gen. Av., p. 252, *Carpodacus*, sp. 5.

*Strobilophaga Caucasica*, Gray and Mitch. Gen. of Birds, vol. ii. p. 387, *Strobilophaga*, sp. 2.

*Caucasian Grosbeak*, Lath. Gen. Syn., tom. iii. p. 112.—Ib. Gen. Hist., vol. v. p. 219.

---

This is by far the largest species of the genus *Carpodacus* yet discovered. Its native habitat is the alpine districts of Thibet and the more northern regions of the Caucasus and the Altai, from all of which countries I possess examples. In size they do not differ from each other, but the Thibetian specimens are much lighter in colour than the Caucasian: this trifling difference is, however, in my opinion not of sufficient importance to be considered other than a local variation, caused in all probability by a difference of climate. The lighter-coloured figure in the accompanying Plate represents a male specimen received from India; the darker-coloured, another of the same sex which has reached me, through the hands of H. E. Strickland, Esq., who obtained it from St. Petersburg.

As is the case with the other members of the genus, much dissimilarity exists in the colouring of the sexes, as will be seen on reference to the figures.

Latham in his "General History of Birds" states, that in the colder parts of the Caucasian mountains it frequents the stony hollows, and feeds principally upon the berries of the sea buckthorn (*Hippophaë rhamnoides*, Linn.), a plant growing there in abundance, and which by swallowing the berries whole the bird often propagates; that it is frequently seen in vast flocks, and that its note is not unlike that of a bullfinch.

The male has the crown of the head, the nape, back, wing-coverts, scapularies and upper tail-coverts of a beautiful pale rosy grey, the rosy tint predominating on the margins of the wing- and tail-coverts; forehead, ear-coverts and throat shining white, bordered with carmine-red; throat, breast and abdomen carmine-red, with a triangular spot of shining white at the tip of each feather, giving it a spangled appearance; under tail-coverts pale carmine-red; rump carmine-red; primaries, secondaries and tail brownish black, narrowly edged with reddish; upper mandible dark brown, under mandible fleshy horn-colour; feet dark brown.

General plumage of the female pale brown, still lighter beneath, the feathers of both the upper and under surface streaked down the centre with dark brown; primaries and secondaries brown edged with pale brown; bill and feet as in the male.

In the male from Siberia the white marks are larger, and the red tint not so deep, producing a much lighter colouring.

The Plate represents both the dark and light coloured males, and a female of the natural size.

CARPODACUS RHODOCHLAMYS.

# CARPODACUS RHODOCHLAMYS.

## Red Mantled Grosbeak.

*Pyrrhula (Corythus) rhodochlamys*, Brandt, Bull. de l'Acad. de St. Pétersb. 1843, p. 27.
*Strobilophaga rhodochlamys*, Gray and Mitch. Gen. of Birds, vol. iii. App. p. 18.
*Carpodacus rhodochlamys*, Bonap. et Schlegel, Mon. des Loxiens, p. 22. pl. 25.
———— *Sophia*, Bonap. et Schlegel, Mon. des Loxiens, p. 22. pl. 24.

---

The temperate regions of Upper India, the Himalayas, Thibet, and the more northern mountains of Altai, are the principal localities inhabited by this species. I find that specimens from the Altai and from Upper India are alike almost to a feather; I also find that the fine male bird from which the Prince of Canino and Dr. Schlegel drew their figure in their "Monographie des Loxiens" and one sent from St. Petersburg are identically the same. This northern and eastern species is still very rare in the collections of Europe, and, as is the case with many other birds inhabiting the great plateaus of Siberia and Tartary, little or nothing is known respecting its habits and economy.

The term *rhodochlamys* being the first applied to the species, I am compelled by the law of priority to give it the preference over that of *Sophia*, assigned to the adult male by the Prince of Canino and Dr. Schlegel in honour of Her Majesty the Queen of Holland, which justly deserved compliment I should otherwise have been happy to perpetuate.

The male has the feathers of the supercilium, the cheeks and throat shining rosy white; upper surface greyish brown, strongly tinged with rosy red; the crown of the head washed with purplish rose-colour and a line of dark brown down the centre of each feather; under surface and the rump of a deep rose-red; quills and tail-feathers brownish black, margined with greyish red; under wing-coverts rosy white; upper mandible brownish grey, under mandible yellowish; feet brownish yellow.

The general colour of the female is yellowish brown, somewhat lighter on the under surface, and with a streak of brownish black down each feather; the wings and tail are brown with paler margins, especially on the greater and middle coverts of the wings.

The Plate represents two males and a female of the natural size.

URAGUS SIBIRICUS.

W. Hart. del. et lith.

Walter, Imp.

# URAGUS SIBIRICUS.

## Siberian Grosbeak.

*Loxia sibirica*, Pallas, Reis. Russischen Reichs, Theil ii. Anhang, p. 711, no. 24 (1773).
*Siberian Grosbeak*, Latham, Gen. Syn. Birds, ii. pt. i. p. 124 (1783).
*Pyrrhula caudata*, Pall. Zoogr. Rosso-Asiat. ii. p. 10, pl. 37 (1811).
*Pyrrhula longicauda*, Temm. Man. d'Orn. i. p. 340 (1820).
*Corythus longicauda*, Gould, B. of Europe, iii. p. 205 (1837).
*Corythus sibiricus*, Bp. Comp. List Birds Eur. & N. Amer. p. 38 (1838).
*Uragus sibirica*, Keys. & Blas. Wirb. Eur. p. xl. (1840).
*Uragus sibiricus*, Gray, Gen. of Birds, ii. p. 387 (1844).—Bonap. & Schlegel, Mon. des Loxiens, p. 30, pls. 34, 35 (1850).—Bonap. Consp. Gen. Av. i. p. 529 (1850).—Gray, Handl. B. ii. p. 102, no. 7529 (1870).—Swinh. Proc. Zool. Soc. 1871, p. 387.—Severtzow, Turkest. Jevotn. p. 64 (1873).—Dresser, Ibis, 1875, p. 245.—Taczan. Bull. Soc. Zool. France, i. p. 182 (1876).—David & Oust. Ois. Chine, p. 357 (1877).—Prjev. in Dawson Rowley's Orn. Misc. ii. p. 304 (1877).—Seebohm, Ibis, 1880, p. 187.
*Erythrothorax caudatus*, Brehm, Naumannia, 1855, p. 276, note.
*Pyrrhula (Uragus) sibirica*, Schrenck, Reisen im Amur-Lande, p. 290 (1859).—Radde, Reisen Sibirien, p. 181 (1863).

---

The Siberian Grosbeak was for a long time considered a European bird, and was figured by me forty years ago in my 'Birds of Europe.' The authority for this appears to have been the late Mr. Temminck, who, in his 'Manuel,' gave it as a migrant to Southern Russia, and said that it passed into Hungary. There can be no doubt, however, that this statement is entirely erroneous; and in all recent works on European ornithology the species has been very properly omitted from the list.

Pallas, the discoverer of the species, found it abundant in the poplar-woods shading the banks of the torrents on the Altai, and in the whole of Eastern Siberia. In winter it wanders about in small bands in the tufty bushes. It feeds on seeds of every kind of plant, principally those of *Artemisia integrifolia*, the cinquefoils, and Compositæ, in which the flora of Siberia is so rich. Its note is like that of the common Linnet. Mr. Seebohm has received specimens from the neighbourhood of Kras-no-yarsk; and he says that Dr. Theél obtained it at Yen-e-saisk. It is also said by Dr. Severtzow to be a winter visitant to Turkestan, in which district it breeds. Dr. Radde procured the Siberian Grosbeak in most places where he collected in Eastern Siberia; and it is very common there, according to Dr. Dybowski. Radde would unite with the present bird the Japanese *Uragus sanguinolentus*, which Prjevalski found resident in Manchuria, along with *U. sibiricus*; and it is certain that the Japanese bird is also found on the coast of Siberia, as Mr. Janskowski has procured it on the island of Askold; but it is not certain whether *U. sanguinolentus* migrates into China, as is the case with *U. sibiricus*. Abbé David states that he has seen the present species many times in winter in the neighbourhood of Pekin, where he killed a fine female on the 11th of April, from which it would appear that some individuals remained after the departure of the cold season. Colonel Prjevalski, in his notes on the Birds of Mongolia, observes that this species came under his observation only in the Guchin-gurb hills, north of Dolan-nor, late in March and early in April, in pairs and small flocks, in the bushes overgrown with weeds and long grass.

The following is a translation of the descriptions given by Bonaparte and Schlegel in their Monograph :—

"*Adult male.* Forehead and lores dark carmine red; upper surface of the head, cheeks, and throat of a lustrous whitish rose-colour, more or less washed with greyish on the top of the head; feathers of the mantle and scapulars of a greyish colour more or less washed with carmine rose, and having in the centre of each a longitudinal streak more or less dark, or even blackish. Rump, lesser wing-coverts, breast, and belly rose-coloured more or less tinged with carmine. Quills black, with a white edging; the inner secondaries with very broad white edges. Greater and median wing-coverts for the most part pure white, but black towards their base. The three central lines of tail-feathers black, the three outer pairs white, with black shafts, and having their inner webs bordered with black, which is broad on the fourth pair, but hardly perceptible on the outer pair; lower wing-coverts of the male white, washed with rose-colour on the smaller coverts; the red tints of the males often show very perceptible shades in different individuals, so that, while some are decidedly pale, others have this colour more or less brilliant. According to Pallas these are the examples from Dauria, which have much less brilliant colours than those which inhabit the banks of the Yen-e-say, while those from the Altai are recognized by their dull coloration.

"The female is distinguished from the male by the ground-colour of its plumage, which is of a yellowish grey, clearer above, and inclining to white on the hinder parts of the body. Pallas states that these colours show sometimes slightly pronounced shades of red."

The figures in the Plate represent two males and a female, of about the natural size, and are drawn from specimens in my own collection.

[R. B. S.]

RHODOPECHYS SANGUINEUS.

J. Gould & W. Hart del. et lith.

Walter imp.

# RHODOPECHYS SANGUINEA.

## Crimson-winged Finch.

*Fringilla sanguinea*, Gould, P. Z. S. 1837, p. 127.
*Erythrospiza phœnicoptera*, Bp. Consp. Gen. Av. i. p. 535 (1850).—Bp. & Schl. Monogr. Loxiens, pt. 2, pls. 30, 31.
*Fringilla rhodoptera*, Licht. Mus. Lugd. fide Bp. ut suprà (1850).
*Carpodacus rhodopterus*, Licht. Nomencl. Av. p. 48 (1854).
*Rhodopechys phœnicoptera*, Bp. Cat. Parzud. p. 4 (1856).
*Fringilla coccothraustes phœnicoptera*, Bree, B. of Eur. iii. p. 95 (1867).
*Carpodacus phœnicopterus* (Bp.), Tristram, Ibis, 1868, p. 208.
*Erythrospiza sanguinea*, Dresser, Birds of Europe, pt. li. (1876)

---

As the colours of the wings and tail would indicate, this handsome Finch is an inhabitant of the great desert plains of Central Asia. It was first described by me as long ago as 1837, from a single specimen of the male, which had been killed in Persia; it has been figured in Bonaparte and Schlegel's 'Loxiens,' Bree's 'Birds of Europe,' and other publications; but by far the most voluminous account is that published by Mr. Dresser in his work on the Birds of Europe. Now, as I never have had the good fortune to see this fine bird alive, although I had that of describing it, I trust I shall not be deteriorating from the fine works just quoted if I make an extensive extract from the book of Mr. Dresser, which I do with full acknowledgment. He says:—"This rare and beautiful bird seems to be met with only in the south-eastern portion of the region of the ornithology of which I am treating, being found in the Caucasus and Palestine, ranging eastward into Turkestan. It is, however, somewhat remarkable that Loche records its occurrence in Algeria, and states that it is only met with in the northern portions of the province. He says that he has seen one from the frontier of Tunis, obtained through Dr. Bovry, and another, in very bad condition, from near Zaatcha. I may, however, here remark that none of the later travellers met with it in North-west Africa; and it seems possible that there may be some mistake as regards the true localities whence the specimens recorded by Loche were obtained. It was first described by Gould (*l. c.*) from a specimen obtained at Erzeroom, and has since been met with by Canon Tristram and Mr. Cochrane on Mount Lebanon. The former of these gentlemen writes ('Ibis,' 1868, p. 208) as follows:—'On the north side of Hermon occurs also *Carpodacus phœnicopterus*, Bp. It is not only local but very scarce, yet unquestionably sedentary, concealing itself after the manner of our Bullfinch. We never could detect its nest, and very rarely caught a glimpse of it. It does not appear to descend as low as the villages of Lebanon, excepting in winter.' Von Heuglin says that there is a specimen in the Mergentheim collection which is stated to have come from Arabia; and Mr. Blanford informs me that he only once met with it on his last expedition to Persia. A flock was sitting on some steep rocks by the side of the road in a high valley of the Elburz, and he had the good fortune to bag three. Dr. Severtzoff, who met with it in Turkestan, says it is resident in that country, but is rather sporadic in its distribution. Beyond the above data, I find no information on record respecting its range; and, indeed, it appears to be nowhere common. Canon Tristram, who was fortunate enough to see this bird alive, gives me the following note:—'I never met with *Erythrospiza sanguinea* but twice in the Lebanon. On the first occasion I had a good view of a brilliantly plumaged male (I presumed), towards the end of May. It was flitting restlessly from tree to tree in an open space on the mountain-side, where the trees were sparse and isolated. There being no cover, I was unable to secure it. A few days afterwards I shot a specimen among scrub and dwarf cedars, a female, but saw no others with it. There were many *Emberiza cia*, with whom it was on social terms. Mr. Cochrane shot a bird from the nest the same week, and brought the nest to camp, containing one egg. He kindly gave me the bird shot from the nest, which I have in my collection. He told me that he found the nest in a tree. My impression is that the nest was an ordinary Finch-nest, of the character of that of the Greenfinch. The bird appears to affect the open spaces with scrub and a tree here and there, and to avoid the thickest forest.' The egg above referred to by Canon Tristram is in my collection, and is, I believe, the only authentic specimen known; I received it from Mr. Cochrane, who informs me that he found the nest, which contained but one egg, near the celebrated grove of cedars on Lebanon, on the 24th May 1864, and he succeeded in shooting the parent bird, which he gave to Canon Tristram. Unfortunately he did not keep the nest, and has supplied me with no further data respecting its structure or, indeed, respecting the nidification of this rare bird. The egg

is white with a faint greyish sea-green tinge, very minutely (almost imperceptibly) dotted with grey, chiefly at the larger end, and measures $\frac{22}{40}$ by $\frac{14}{40}$ inch."

"Cabanis," says Dr. Bree, "placed this bird in a new genus, that of *Rhodopechys*, in which he was also followed by the versatile Prince of Canino. It differs, however, from the Bullfinches in the size and form of the beak, and belongs, I think, more strictly to the genus *Coccothraustes*, although here, again, the form of the wing is different."

Bonaparte says of it in his 'Conspectus Avium Europearum,' p. 28:—"This elegant *Erythrospiza phœnicoptera*, which does not differ from the *Fringilla sanguinea* of Gould, from the confines of Persia and Circassia, claims its place in the ornithology of Europe, which it can always ensure by a few movements of its wings. It is essentially sedentary, only changing from plains to mountains."

As specimens differ in their colouring, I must ask my readers to consult the accompanying drawing, made from Persian examples, and representing the species of the size of life.

ERYTHROSPIZA OBSOLETA.

J. Gould & W. Hart del. et lith.

Walter imp.

# ERYTHROSPIZA OBSOLETA.

## Rosy-winged Finch.

*Fringilla obsoleta*, Lichtenstein in Eversmann's Reise, Anhang, p. 132 (1823).—Bonap. & Schleg. Monographie des Loxiens, p. 28 (1850).
*Erythrospiza obsoleta*, Licht., Scully in 'Stray Feathers,' vol. iv. p. 168.

---

This is one of the most charming of the insessorial birds inhabiting the great plains of Central Asia, and forms a part of a group of Finches characterized by many harmonious tints. To state the range of the present bird over the highlands of Asia is beyond my power; it appears to be as familiar to the Kirghiz and other inhabitants of those desert countries as the Greenfinch and Chaffinch are to the people of England; and so stationary does it appear to be, that it never crosses the Himalayas towards the south and but seldom descends to the lower countries of Russia and Siberia on the north.

When that celebrated work 'La Monographie des Loxiens' of Bonaparte and Schlegel was published, the individual from which the figure was taken was probably the only specimen known; and this being in a bad state of plumage would account for the meagreness of the figure. As considerable information has in recent years been added to the history of the bird as then published, I shall be able to add something which I trust will be of interest to ornithologists of the present time. I am also able to give a drawing from very perfect specimens of both sexes, killed in the height of summer, when the bills are black and the markings of the plumage delicate and beautifully contrasted. I have made a point of speaking of the colouring of the bill, because, as in the Sparrow and many other fringilline birds, this organ is totally different at opposite periods of the year. Dr. Scully, in his valuable paper entitled "A Contribution to the Ornithology of Eastern Turkestan," in 'Stray Feathers,' says, "it is numerous in the plains of Kashgharia, where it is a permanent resident, frequenting hedges, often in company with the Sparrow (*Passer montanus*). Near Yarkand, in summer, it was found in orchards, and in clumps of poplars. It has a very sweet song, and feeds entirely on seeds. The Turki name for the species is *Tumochuk*.

"It lays in May, the nest being usually placed in high trees, often in the poplar (*Populus balsamifera*). A nest, obtained on the 13th June, contained five eggs, in which the embryo was found to be formed. The nest is of a broad oval shape, 5 in. 75 lin. in length by 4 in. in breadth, thickness of side walls about 5 lines. It is made up of twigs and fibres. The egg-cavity is oval (3 in. 5 lin. by 2 in. 5 lin.), lined with fine vegetable fibres and some horsehair; depth of cavity 1 in. 25 lin. The eggs are moderate ovals, smaller at one end, and are fairly glossy. The ground-colour is pale bluish grey, with fine purplish brown spots and streaks sparingly scattered at the small end, but accumulating to form nearly a cap or zone at the large end. In size they vary from 76 to 78 lines in length, and from 57 to 58 lines in breadth; the average of four eggs is 77 lines by 57·5 lines."

I cannot close this account without thanking Capt. Biddulph for the loan of skins of this as well as other interesting birds from Kashgar and the bordering countries.

The male, in summer plumage, has a very narrow reddish brown band across the forehead, while in the female the face is uniform; crown of the head and upper surface of the body, chest, and flanks greyish brown; centre of the abdomen and under tail-coverts white; centre of the wings rosy red; primaries and tail-coverts black, largely margined with white feathers. In the winter plumage the bills are yellowish horn-colour, with small black feathers at the base of the mandibles.

Total length 5 inches; wing 3, tail 2½, bill ½, tarsi 3½.

The Plate represents a male and female, in the plumage of summer, of the size of life.

ERYTHROSPIZA INCARNATA, Sclat.

J.Gould & W.Hart del. et lith.

Walter Hart

# ERYTHROSPIZA INCARNATA, *Sev.*

## Rosy Finch.

*Erythrospiza incarnata*, Severtzow, Turkest. Jevotn. pp. 64, 117.—Dresser, Ibis, 1875, p. 245.
*Carpodacus mongolicus*, Swinhoe, Proc. Zool. Soc. 1870, p. 447.

---

Judging from the numerous specimens that have come under my notice during the last few years, this bird must be a very common species on the great tableland of Central Asia. Capt. Biddulph appears to have found it plentiful at Cashgar, and the Russian traveller Severtzow in the countries more to the northward. Having received a visit from the latter gentleman during his late sojourn in London, he discovered, among other species of Asiatic Finches in my collection, his *Erythrospiza incarnata*, under which name I had prepared my Plate for the 'Birds of Asia;' but further research convinced him that the *Carpodacus mongolicus* of Swinhoe was the same bird, and that his (Severtzow's) name ought to be placed as a synonym. I greatly regret that this confusion should have occurred; but it may be set right by any future ornithologist who may be writing on the birds of this group. I received the following note from M. Severtzow, written after a visit to Mr. Swinhoe:—

"Sir,—I went from you to Mr. Swinhoe and saw the original types of his *Erythrospiza mongolica*. It is quite *identical* (alas!) with my *C. incarnata*, and *different* from your specimen shot at Kalgan which you showed me.

"The types of *E. mongolica* have faint rosy superciliar streaks, but *no* rose-colour on the crown, middle of the abdomen white, and white-edged tail-quills—all characters of my *E. incarnata*.

"Your *E. mongolica* differs from the type, (1) by the purplish rose-shaded crown, (2) by the rosy abdomen, (3) by the absence of white edges on the tail; the rump-feathers are wanting.

"Accordingly, the bird of Kalgan appears to be undescribed.

"Yours, very truly,
"N. SEVERTZOW."

Ornithologists are much indebted to Mr. Dresser for his translation of Severtzow's book, without which the original work would have been inaccessible to the student; and we are therefore able to give the following note of Dr. Severtzow's on the present species:—

"This bird is a resident in Turkestan, and is found after the breeding-season in flocks of from 50 to 100 individuals. It was killed at the end of September on the Issik-kul, in August and October on the Upper Narin, at an elevation of from 9000 to 10000 feet; in winter, however, it is not found higher than 2000 feet. In the steppes, everywhere, in summer as well as in autumn and winter, we found this bird only near stony or clayey places. In autumn and spring it moves about very much, feeding on small seeds, and avoids the woods and even the bushes. It runs very fast, although it has such short legs; and it flies swiftly and well." Dr. Scully, who identifies the species with *Carpodacus mongolicus*, writes as follows:—"This species is only a winter visitant to Eastern Turkestan, and even then is not common; it is said to migrate eastwards, towards China, in the spring. Near Yarkand it frequents a sort of desert-bush called *kamghak*, on the seeds of which it appears to feed. It is rather a favourite cage-bird with the Yarkandis, on account of its sweet song; and to this circumstance I am indebted for my specimen, purchased in June in Yarkand. The Turki name for this species is *Tagh tumochuk* ('the mountain-tumochuk'), the latter being the name of *Erythrospiza obsoleta*; so that the Yarkandis would appear to be *d'accord* with M. Severtzow as to the genus to which the bird belongs."

Mr. Swinhoe described his *C. mongolicus* in the 'Proceedings' of the Zoological Society for 1870; and in the same Journal for the year 1871 (p. 387) he further writes concerning the species:—"On the western hills near Pekin. Resident in Ordo (*David*)."

The following description of Dr. Severtzow's is copied from Mr. Dresser's paper (*l. c.*):—

"*Adult male in autumn dress.* Crown, back, and shoulders greyish sandy brown, with lighter edges and dark central lines; hind neck and cheeks similar, but without dark lines; superciliary

region, throat, breast, and flanks carmine, with grey edges to the feathers; abdomen and under tail-coverts white, with a carmine tinge; quills blackish brown, with light edges, which latter are grey on the lesser wing-coverts, and on the larger coverts are very broad, white, tinged with carmine towards the tips; on the median coverts the margins are white, but the carmine is less developed; hence on the wing are two white patches divided by carmine;, the primaries have whitish margins, which in a few are washed with carmine. The tail-feathers are blackish brown, with grey edges. The upper mandible is yellowish brown, the lower mandible light yellow; legs are light brown; iris dark brown.

"In spring all the rose-coloured feathers have become bright blood-red, and the whitish has changed to a snowy white colour, except the stomach and the under tail-feathers, which are protected from the sun. The rose-colour is brightest on the wings, paler on the throat, breast, superciliary region, flanks, and rump, where only the edges of the feathers are of that colour. The dark lines on the crown- and back-feathers change in spring to a darker colour; and the edges of the grey feathers are lost by that time. The female is, in spring and autumn, of the same colour as the male, and differs from it only in not having the rose-colour on the flanks, the breast, and the median coverts; also the white spots on the wings are smaller.

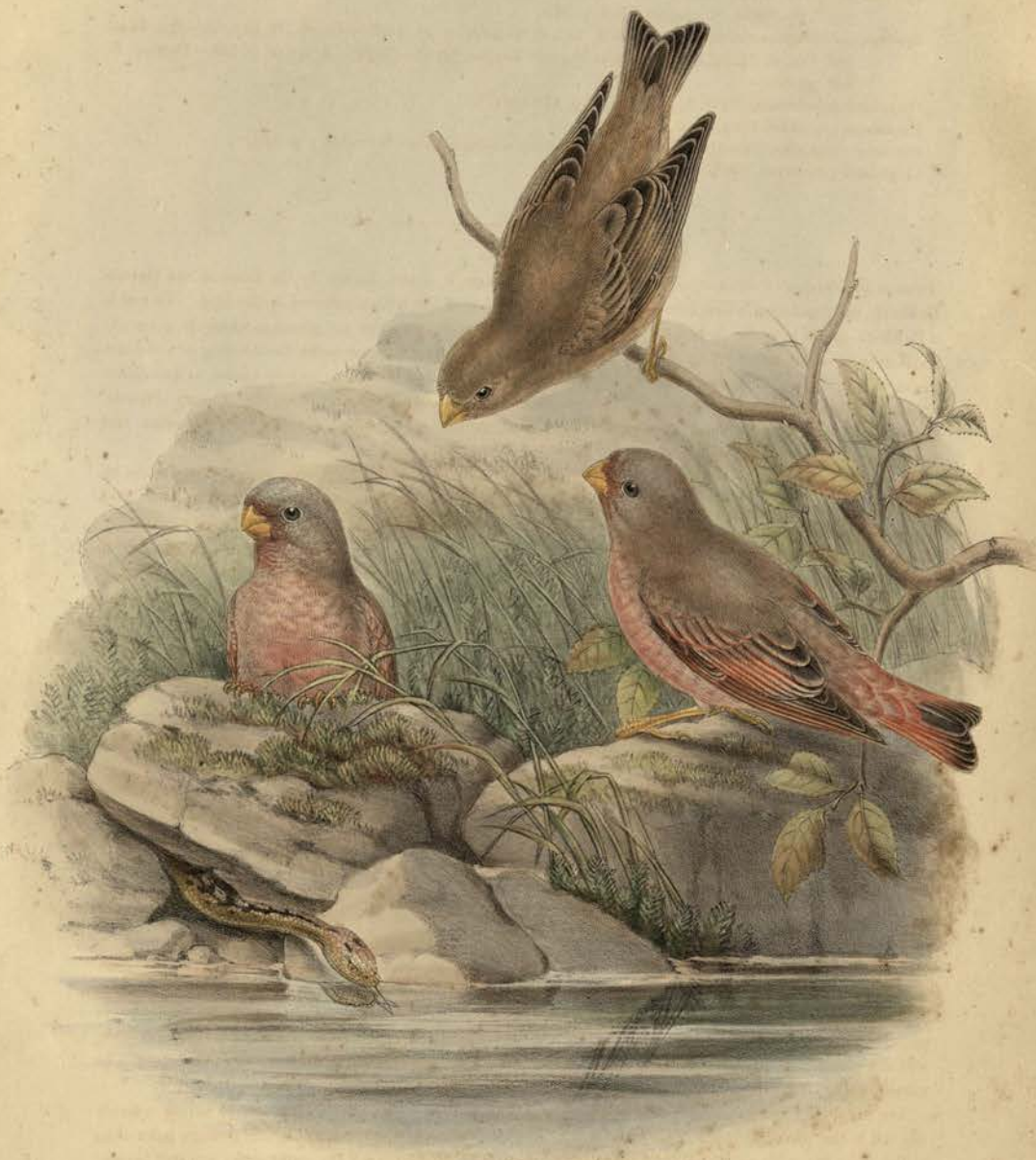
"The young male in the first autumnal plumage is like an old female; but it has no white edges on the large wing-coverts, which are of a brownish red colour; on the median coverts are only very narrow white edges which do not form a white spot when the wing is closed.

"The young female bird in first autumn plumage has scarcely any red colour at all, it being replaced by light grey, which is faintly shaded with red on the breast.

"*Measurements.* Male—length 6 in. 3–6 lin., extent 10 in. 5 lin. to 11 in.; female—length 6 in. 2–4 lin., extent 10 in. 4–5 lin., wing 3 in. 5 lin., tail 2 in. 1 lin, culmen 3½ lin., middle toe 5⅓ lin., tarsus 6½ lin."

On the eve of going to press, Captain T. Biddulph kindly forwarded me the accompanying note on the species:—"*Erythrospiza incarnata* was first met with by us (during the Yarkand Expedition) at Jankse, between Leh and the Pangong lake, in September, in small numbers. It was observed at intervals, generally in pairs, in the Karakash valley; and on our first arrival in the plains of Turkestan, in October, I saw it in large flocks of several hundreds; later on I only observed it in smaller numbers."

The figures in the Plate are of the size of life.



ERYTHROSPIZA GITHAGINEA.

J.Gould & W.Hart del. et lith.

Walter Imp.

# ERYTHROSPIZA GITHAGINEA.

## Trumpeter Bullfinch.

*Fringilla githaginea*, Licht. Verz. Doubl. p. 24 (1823).
*Pyrrhula payraudæi*, Audouin, Expl. Egypte, Explic. Planches, p. 286, pl. 5. fig. 8 (1825).
*Pyrrhula githaginea*, Temm. Man. d'Orn. iii. p. 249.—Id. Pl. Col. iii. pl. 400.—Werner, Atlas, Granivores, Suppl. pls. 7, 8.—Bolle, Naumannia, 1858, p. 369.
*Erythrospiza githaginea*, Bonap. Comp. List B. Eur. & N. Amer. p. 34 (1838).—Gould, B. Eur. iii.—Bp. Faun. Ital. Ucc. pl. 35. fig. 3.—Id. & Sch. Monogr. Loxiens, pl. 33.—Shelley, B. Egypt, p. 155.—Dresser, B. Eur. pt. 35.
*Carpodacus crassirostris*, Blyth, J. A. S. B. xvi. p. 476 (1847).
*Carpodacus payraudæi*, Gray, Gen. B. ii.
*Bucanetes githagineus*, Cab. Mus. Hein. i. p. 104 (1850).—Heuglin, Orn. N.O.-Afr. i. p. 656.
*Carpodacus githagineus*, Brehm, Vogelf. p. 91 (1855).

---

Though this bird is as often called the Trumpeter Bullfinch, it is also known by the name of the Desert-Bullfinch, an appellation which conveys at once an intimation of the habitat affected by the bird. To call it a Bullfinch appears to me somewhat of a misnomer when one recalls the gay plumage which is generally characteristic of the latter group of birds; and it has been rightly separated under the heading of a distinct genus, *Erythrospiza*. It is essentially a bird of the Desert region, or of what is usually known to naturalists of the present day as the Mediterraneo-Persic Subregion; and it ranges from the Canary Islands, throughout the whole of North-western Africa, Egypt, Nubia, and Arabia, extending to Palestine and eastwards as far as Scinde.

Captain Shelley, in his 'Birds of Egypt,' observes:—"This pretty little bird, rendered so conspicuous by its bright red bill, is very plentiful in Upper Egypt and Nubia, where it may be met with in pairs and flocks along the confines of the desert. It invades the cultivated land for its food, which consists entirely of small seeds, and at such times may be seen clustered in groups upon the mustard- and other plants, which wave to and fro under the weight of the birds as they busily peck away at the seeds. In flight it closely resembles the Linnet; but its pale roseate tints easily distinguish it from any other Egyptian Finch." Its habits in Scinde appear to be very similar, according to Mr. Hume, who writes:—"It was met with only at comparatively short distances from the lower slopes of the hills which divide Sindh from Khelat. They were seen exclusively on small patches of cultivation which here and there occur, oases in the barren waste which fringes the skirts of the mountains. They were always in small flocks, feeding on a kind of mustard, very tame, but difficult to shoot, because invariably, when in the least disturbed, they run in amongst the mustard-plants along the ground, with which their upper surfaces are almost absolutely unicolorous."

Of the peculiar song, from which the species gets its name of Trumpeter, Mr. Dresser has collected several accounts. He observes respecting this feature:—"The song of the male is by Dr. Bolle said to closely resemble the low note of a small penny trumpet, sometimes loud and clear, and at others long drawn out and harsh. A note frequently used is a rather harsh *kä-kä-kä*; and they frequently call to each other, using a cackling note like *kekek, kekeek*; and the alarm-note, or note of astonishment at any thing unusual, is a loud *schak, schak*. Von Heuglin says that the call-note is a wooden *ter-ter*; and its song is very poor, resembling the sound produced by blowing into a child's wooden trumpet."

The following description of the adult male is given by Captain Shelley:—"The feathers round the beak are brightly tinted with rosy red; top of the head, ear-coverts, and sides of the neck delicate ashy grey, shading on the nape and back into soft pinkish brown; rump and upper tail-coverts pink, the feathers edged with carmine; tail brown, with a similar edging towards the base of the feathers; underparts pink, with the ends of the feathers carmine; beak bright orange-red; legs brownish flesh-colour; iris brown. In winter plumage pink takes the place of the carmine."

The female differs (as stated by Mr. Dresser) from the male in being much duller, and in having scarcely any red in the plumage; upper parts dull dust-brown, the underparts similar but lighter; wings paler than in the male, the quills with only the faintest wash of pink on the edge of the outer web; tail dull brown, the feathers edged with pale red at the base; upper tail-coverts slightly tipped with rosy red.

The figures in the accompanying Plate represent the two sexes of the natural size, the female being in my own collection, while the male bird was very kindly lent to me by Captain Shelley.

UROCYNCHRAMUS PYLZOWI, *Prjev.*

# UROCYNCHRAMUS PYLZOWI, *Prjev.*

## Pylzoff's Rose Bunting.

*Urocynchramus pylzowi*, Prjevalsky, Birds of Mongolia, in Rowley's Orn. Misc. ii. p. 309, pl. vii.

---

The travels of Colonel Prjevalsky through the unknown regions of Mongolia and Thibet have arrested the attention of naturalists during the whole time that this adventurous traveller has been pursuing his dangerous journeys; and an additional interest has been bestowed on the countries which he has been exploring, as they were known to trench upon the boundaries of those districts which the energy of Père David had opened up to scientific research. Colonel Prjevalsky has not only made us acquainted with the breeding-homes of many rare and little-known species, but he has also discovered several very interesting forms of birds, which I hope to be able ere long to figure in the present work. While writing on this subject, however, it would be ungracious to omit all mention of the great obligation under which English ornithologists labour towards the late Mr. Dawson Rowley for having translated the ornithological writings of Colonel Prjevalsky into the English language; without this assistance it would have been impossible for the majority of ornithological students to become acquainted with the notable facts which that explorer brought to light. I am in consequence enabled to present my readers with the following account of the present species, as given by Colonel Prjevalsky. It will be noticed that he has bestowed upon the bird a new generic title (*Urocynchramus*) on account of the peculiar shape of the bill, which is like that of a Bunting, while in the tail the species resembles the Siberian Grosbeak (*Uragus sibiricus*). From an examination of the specimen I consider that the proper place for the bird in the natural system will be in close proximity to the latter bird, notwithstanding its Bunting-like bill. Colonel Prjevalsky writes:—

"The long graduated tail and the rose of the plumage, which is not found in any other species of *Cynchramus*, form the principal characteristics of the present species, which I have named after my travelling companion, M. A. Pylzoff, who has been so useful to our expedition by his untiring energy.

"We first met with *U. pylzowi* on the sources of the river Tetung, during the autumn migration, early in October 1872; and in the spring of the following year we again fell in with these birds there, early in April; and, as before, they kept singly or in small companies in plains and valleys near rivers, usually about the low thick bushes of *Potentilla tenuifolia*.

"Then, again, during our stay of more than a month in the mountains south of the central course of the Tetung we did not meet with these birds, nor in the preceding year, and found them breeding only towards the end of May, in the alpine region of the mountain north of the Tetung. Here, as also in the former locality, the birds kept almost exclusively in the bushes of *Potentilla tenuifolia*. In Kan-su it occurs only sporadically, and finds there its northern limit of distribution.

"The voice of *U. pylzowi* very much resembles that of *Cynchramus schœniclus*; and the flight reminds one of *Uragus sibiricus*, for which the first bird I shot was mistaken when on the wing."

The following diagnosis of the species is also taken from Colonel Prjevalsky's work:—

"*Adult male.*—Above fulvous, streaked with blackish; throat, chest, cheeks, and abdomen rosy; wing-coverts dusky, edged with rufous; tail long and graduated; the outer tail-feathers rosy, bordered with a white tip, the four middle ones brown, margined with fulvous.

"*Female.*—Underneath buffy white, streaked with blackish, the three outer tail-feathers orange or margined with orange."

Mr. Henry Seebohm, in whose collection was one of these birds, received in exchange from the St. Petersburg Museum, has been so good as to lend it to me for the purpose of the present work. The figures in the Plate represent two males, in different positions, and a female, of the natural size, the drawing of the latter having been made from description.

CARPODACUS ROSEUS, *Bonap.*

J. Gould & W. Hart. del. et lith.

Walter Inn.

# CARPODACUS ROSEUS.

## Rosy Grosbeak.

*Fringilla rosea*, Pallas, Reise Russischen Rheichs, iii. p. 699.
*Passer roseus*, Pallas, Zoographia Rosso-Asiat. ii. p. 23.
*Pyrrhula rosea*, Temminck, Manuel d'Ornithologie, i. p. 335.—Naumann, Vögel Deutschlands, iv. Taf. 113. fig. 3.—Schrenck, Reise Amurlande, p. 295.—Radde, Sibir. Reise, p. 186.
*Carpodacus roseus*, Kaup, Natürl. System, p. 161.—Gray, Genera of Birds, i. p. 384.—Bonap. & Schlegel, Monogr. *Loxiens*, p. 18, pls. 19, 20.—Bonap. Conspectus Gen. Av. i. p. 533.—Degland & Gerbe, Oiseaux d'Europe, p. 157.—Gray, Hand-l. Birds, ii. p. 102.—Cordeaux, Ibis, 1875, p. 183.—Taczanowski, Bull. Soc. Zool. France, i. p. 181.—Seebohm, Ibis, 1876, p. 165.—Blakiston & Pryor, Ibis, 1878, p. 545.
*Erythrospiza rosea*, Bonap. Comp. List Birds Europe and N. America (1838), p. 34.—Gould, B. Europe, iii. pl. 207.
*Erythrothorax albifrons*, Brehm, Naumannia, 1805, p. 276.
*Propasser roseus*, David & Oustalet, Oiseaux de la Chine.
*Uragus sibiricus*, Swinhoe, Ibis, 1876, p. 333 (*errs*).

---

The home of the present beautiful Grosbeak is Siberia and the Eastern Palæarctic region; but it possesses considerable interest from its occidental occurrence in Europe. Bonaparte and Schlegel state that it is seen, though very rarely, in Russia, in Hungary, and even in Germany. More definite instances of its capture within the limits of the Western Palæarctic region are those which have taken place in Heligoland, no less than four specimens being in Mr. Gätke's collection. It seems to wander occasionally to the island in the autumn, two of Mr. Gätke's specimens having been captured in the month of October, all the birds in his possession being immature.

Pallas, who first discovered this bird, says that it nests in the north of Siberia on the banks of the Lena and Tungusk rivers, and winters in the willow-covered islands and desert-tracts near the Silenga and Uda rivers. Schrenck observed it in Amurland; but only in autumn, and Radde met with it in the Buraga Mountains in autumn and spring. It was found by Dr. Dybowski to be common in Eastern Siberia at the season of migration; but it does not nest either in the southern parts of Lake Baical or in Dauria. Père David observes that it is very common in the eastern parts of Siberia, and visits the neighbourhood of Pekin in large numbers towards the end of the autumn; but in the spring it has totally disappeared from China, having returned to the more northern countries before the end of the winter. During the extreme cold weather he found it established in the Isinling, feeding on seeds and small grains, which constitute its principal food. In Japan, according to Mr. Blakiston and Pryer, it is called O-mashi-ko; and they have met with it in Yezo and purchased other specimens at Tokio.

The following description of the sexes is translated from the work of MM. Bonaparte and Schlegel:—

"*Adult male.* Lower parts, head, neck, rump, and upper tail-coverts of a beautiful rose-colour, passing into white on the lower belly and under tail-coverts; all the plumes of these parts are blackish on their basal half; and this tint is often prolonged, in the form of a pointed spot, as far as the middle of the web; frontal feathers and those of the throat pointed, of a shining white colour slightly tinged with rose; feathers of the mantle each with a large, blackish, pointed spot, and largely bordered with reddish on each side; wings blackish brown; lesser wing-coverts edged with rose-colour, the least margined in their terminal half with white slightly tinged with rose-colour; the greater coverts have a border of rose-colour, verging to carmine, occupying the whole of the outer web towards the point of the feathers; quills bordered with a tinge of buff passing into white on the edge of the tertiary quills; lower wing-coverts white, the small feathers near the edge of the wing tinged with reddish; tail-feathers blackish brown, edged with reddish on their outer web.

"*Young female.* Above olive-brown, slightly tinged with yellow on the rump, edges of the feathers of a clearer colour, passing more or less into whitish on the mantle and rump; an indistinct whitish line behind the eye; wings and tail blackish brown passing into olivaceous grey on the outer edge of the feathers; lesser and greater wing-coverts tipped with yellowish grey; under surface white, uniform on the lower abdomen and under tail-coverts, and having on the other parts large longitudinal spots of dark olivaceous brown."

Pallas states that the plumage of the old female has everywhere a slight shade of dark rose-colour, and is a little inferior in size to the male; but this description wants the striations on the upper surface. I may have figured a young male; but, judging from the allied birds, I think I have not, and that the Plate represents two males and a female of the natural size in their finest state of plumage.

PYRRHULA AURANTIA, *Gould*

J. Gould and H. C. Richter, del. et lith.

Hullmandel & Walton, Imp.

# PYRRHULA AURANTIA, *Gould.*

## Orange-coloured Bullfinch.

*Pyrrhula aurantiaca*, Gould in Proc. of Zool. Soc., Part XXV. p. 222.

---

A MORE interesting little bird than the one here figured I have not seen for some time, and I am certain that a knowledge of its existence will be acceptable to every ornithologist; at present it is quite new, only one specimen having been sent to Europe. Thanks to the liberality of its discoverer, Dr. A. Leith Adams, of the 22nd Regiment, this unique bird has been added to the national collection at the British Museum, a very proper resting-place for all such novelties. Science, then, is indebted to Dr. Adams for its discovery, and I, as a devotee to natural history, especially so for his kindness in permitting me to give a figure and description of it in the "Birds of Asia."

There are portions of the great Asiatic continent to the north-westward of our Indian territories which are likely to present us with ornithological novelties for some time to come, inasmuch as they have been less visited than most others, and never very closely investigated. The countries I refer to are Affghanistan, Kafiristan, &c., where Vigne made himself known to fame as a traveller, and Dr. Griffith discovered the beautiful *Pucrasia castanea*.

Dr. Adams informed me that he first met with the Orange-coloured Bullfinch in the month of March 1852, on one of the wooded slopes of the Pir Pinjal Mountains, westward of the Valley of Cashmere; that its habits closely resemble those of *P. erythrocephala*, frequenting, as it does, thick bushy places, and being usually seen in small societies; that it is not uncommon in the valleys and jungles around Cashmere, and that, although the two species are so similar in their habits and in the localities they frequent, he never met with them in company; but he noticed that while the *P. erythrocephala* is tolerably abundant on the ranges around Simla, the present species was only seen on the hills in the neighbourhood and to the westward of Cashmere. Its call-note is not so loud as the clear whistle of the European Bullfinch, *P. vulgaris*, and somewhat resembles the chirp of the Greenfinch, *Chlorospiza chloris*. Dr. Adams tells me he skinned four or five examples, but that all were unfortunately lost, except the one he brought to Europe.

The male has the bill, face, wings, and tail deep purplish black; rump, upper and under tail-coverts white; the remainder of the upper and under surfaces rich reddish orange, deepest above; the lesser wing-coverts are also reddish orange, as is the apical half of the innermost of the greater wing-coverts, while the outer ones are slightly tipped with buffy white; irides black; feet pinky flesh-colour.

"The female differs from the male," says Dr. Adams, "in the following particulars, which you may depend upon being correct, as I transcribe them from notes written at the time the specimens were killed. She has the black circle round the bill as in the male; the head and neck ash-colour like the female of *P. vulgaris*; back ash-colour, slightly tinged with orange; tips of the wing-coverts the same; lower parts like the male, but not so brilliant, and more approaching to olive."

The Plate represents two males of the size of life, and a reduced figure of the female from Dr. Adams's description. The plant is the *Rubus biflorus*.

PYRRHULA ORIENTALIS, *Temm et Schleg*

J. Gould and H.C. Richter, del et lith.

Hullmandel & Walton Imp.

# PYRRHULA ORIENTALIS, *Temm. et Schleg.*

## Oriental Bullfinch.

*Pyrrhula Orientalis*, Temm. et Schleg. Fauna Japonica, p. 91. pl. liii.—Bonap. Consp. Gen Av. p. 525. *Pyrrhula*, sp. 3.

---

"JAPAN produces a Bullfinch resembling in size the smaller race of the European Bullfinches, and which seems to be distinguished from them by the colour of the under surface only, which instead of being of the same bright red as the region of the ears, is ashy-grey, lightly tinged with red during the breeding season; we observe also that the bands on the wings incline much more strongly to ashy-grey, and that the anterior portion of the secondaries is of a uniform black instead of presenting a red spot or stain like that seen in the Common Bullfinch. The relative proportions of the wing-feathers are precisely the same, and the dimensions of the different parts present no difference from those of the common species."

The above passage is taken from Dr. Siebold's "Fauna Japonica," the text of which is by Messrs. Temminck and Schlegel. In this work both the varieties of the male bird are figured, but my own Collection containing only a single male, in what is considered to be the summer dress, I am unable to give a representation of the bird in the other state mentioned. After carefully comparing the Japanese bird with Bullfinches killed in our own island, no doubt remains in my mind as to its specific value; and I may remark, that it is very interesting to find in the fauna of so distant a country as Japan, as well as in several parts of China, well-marked representatives of many species comprised in our own. In size, the Japanese bird somewhat exceeds its British prototype; on the other hand, it is at all times less brilliant in colour; their other distinctions are so clearly pointed out in the passage above quoted, that it is not necessary to repeat them.

The sexes present the usual differences of colour, and I observe that the female is of a somewhat darker hue than the female of the British species.

The male has the crown of the head, back of the neck and face, deep black; upper surface grey, slightly tinged with red; lesser wing-coverts and apical half of the greater wing-coverts brownish grey, forming two distinct bands across the wings, which are black; rump white; upper tail-coverts and tail black; throat and ear-coverts red; breast and under surface grey washed with red; vent and under tail-coverts white; irides dark hazel; bill black; feet flesh-colour.

In the winter season the wash of red disappears from the under surface, leaving that part ashy-grey.

The female has the crown of the head black, the back greyish-brown, and all the under surface grey tinged with red; in other respects she resembles the male.

The plate represents the two sexes of the size of life.

PYRRHULA ERYTHROCEPHALA, *Vig*

J. Gould and H.C. Richter, del. et lith.

Hullmandel & Walton, Imp.

# PYRRHULA ERYTHROCEPHALA, *Vig.*

## Red-headed Bullfinch.

*Pyrrhula erythrocephala*, Vig. in Proc. of Comm. of Sci. and Corr. of Zool. Soc., part i. p. 174.—Gould, Century of Birds, tab. xxxii.—Gray and Mitch. Gen. of Birds, vol. ii. p. 387, *Pyrrhula*, sp. 2.—Bonap. Consp. Gen. Av., p. 525, *Pyrrhula*, sp. 4.—List of Sp. and Draw. of Mamm. and Birds presented to Brit. Mus. by B. H. Hodgson, Esq., p. 111.

——— *erythrocephalus*, Blyth, Cat. of Birds in Mus. As. Soc. Calcutta, p. 123.

---

This fine species possesses the general characteristics of the common Bullfinch of Europe, except in the form of the tail, which is decidedly forked, while in our bird it is even; and in the colour of the head, which is bright rufous inclining to scarlet, instead of being black as in our native species.

The occurrence of this bird in the collections of Europe was formerly so rare, that the single specimen belonging to the Andersonian Museum at Glasgow, from which my original figure and description in the "Century of Birds" were taken, was the only one then known. Shortly afterwards two other examples arrived in England, one of which was deposited in the British Museum, the other in that of the Zoological Society of London; and these three were all the specimens then in Europe.

During the interval which has elapsed between 1832, when the "Century of Birds" was published, and the date 1853 at which I now write, the great chain of the Himalayan and adjoining hills which extend towards the peninsula (the native country of the *P. erythrocephala*) has been traversed by men whose love for natural history has prompted them to procure and send to Europe numerous collections of the productions of those districts; among them many examples of both sexes of this beautiful species have been sent; in order therefore to make known the female I unhesitatingly give a new Plate, comprising accurate representations of both sexes; and figures of every species of the genus will now be found in the "Birds of Europe" and the "Birds of Asia."

Fine examples of both sexes, but especially of the female, are contained in the collection of Indian Birds belonging to Andrew Murray, Esq., of Aberdeen, to whom I am indebted for the loan of them; they were collected I believe in the neighbourhood of Agra.

As is ordinarily the case with the other members of the genus, the sexes differ considerably; they may be thus described:—

The male has a band of black around the base of the beak; crown of the head, occiput and back of the neck bright rust-red; back and wing-coverts olive-grey, the latter crossed by a band of black; wings black, the secondaries glossed with bluish green and exhibiting indistinct bars; rump white; tail-coverts and tail black, the coverts and centre tail-feathers glossed with bluish green and exhibiting bars similar to those on the secondaries; under surface pale orange-red, passing into olive-grey on the lower part of the abdomen; under tail-coverts white; bill black; feet flesh-colour.

The female differs in having the under as well as the upper surface olive-grey, and in having a wash of wax-yellow on the occiput and at the back of the neck, instead of the rich rufous-red of the male. I remark also that the depth of the colouring of the female seems to be subject to variation, some being much paler than others, and having only a faint indication of the wax-yellow wash at the back of the neck.

The figures represent the two sexes of the natural size.

138924

PYRRHULA NIPALENSIS, *Hodgs.*

J. Gould and H.C. Richter del. et lith.

Hullmandel & Walton Imp.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

# PYRRHULA NIPALENSIS, *Hodgs.*

## Nepaulese Bullfinch.

*Pyrrhula Nipalensis*, Hodgs. Asiat. Res., vol. xix. p. 155.—Blyth, Cat. of Birds in Mus. of As. Soc. Calcutta, p. 122.—List of Sp. and Draw. of Mamm. and Birds presented to Brit. Mus. by R. H. Hodgson, Esq., p. 111.

——— *nipalensis*, Gray and Mitch. Gen. of Birds, vol. ii. p. 387, *Pyrrhula*, sp. 3.

——— *nepalensis*, Bonap. Consp. Gen. Av., p. 525, *Pyrrhula*, sp. 5.

---

A similarity of colouring is found to prevail amongst the members of almost every well-defined genus of birds; to this general rule, however, as in every other case, exceptions sometimes occur, and the present bird is an instance in point; the red colouring which pervades the breast of the under surface of the males of every other species being absent in the *Pyrrhula Nipalensis*, besides which the colouring of the sexes is very similar, while in all the other known members of the genus, as now restricted, they are very dissimilar. The rich forests of Nepaul and the regions skirting the great Himalayan range are the localities in which this bird is to be found in a state of nature; and it was there Mr. Hodgson procured the specimens from which the subjoined descriptions were taken.

In size the *Pyrrhula Nipalensis* exceeds all the other known *Pyrrhulæ*, which, coupled with its sombre colouring, precludes the possibility of its being confounded with any of its congeners.

The following is Mr. Hodgson's descriptions above referred to :—

" Form as in *erythrocephala* but the bill grosser, with the tomial line of its upper mandible less even, and the tail still more conspicuously forked and graduated.

" Male. Brown, smeared slaty-blue (like common slate-stone); with black rump, wings and tail all reflecting a brilliant purplish blue gloss; cap picked out with dusky, and a band of the same hue round the base of the bill; a white spot under the eye; band across the rump; lower belly, vent and under tail-coverts white; outer web of the last tertiaries fiery red; bill greenish horn, with black tip; legs fleshy brown; iris brown.

" Female. Rather less, exactly like the male, save only that the outer web of the last quill towards the body is invariably yellow, and not fiery as in the male; the young at first want this distinctive sexual mark.

" Habitat. Northern and central Nepaul."

The figures represent the two sexes of the size of life.

PYRRHULA MAJOR, *Brehm*

J. Gould & W. Hart, del. et lith.

Walter Inn.

# PYRRHULA MAJOR, *Brehm*,

## Northern Bullfinch.

*Loxia pyrrhula*, Linn. Syst. Nat. i. p. 300 (1766).
*Fringilla pyrrhula*, Meyer, Vög. Liv- u. Esthl. p. 81 (1815).
*Pyrrhula major*, Brehm, Vög. Deutschl. p. 252 (1831).—Dresser, Birds of Europe, pt. 51.
*Pyrrhula coccinea*, De Selys Longchamps, Faune Belge, p. 79 (1842).—Blyth, Ibis, 1863, p. 442.—Degland & Gerbe, Orn. Eur. i. p. 251.—Gray, Hand-l. B. ii. p. 99, no. 7481.—Tristram, Ibis, 1871, p. 232.
*Pyrrhula vulgaris*, Kjærb. (nec Temm.), Orn. Dan. pl. xxviii. fig. 2.—Sundev. Svenska Fogl. pl. ii. figs. 4, 5.

---

This fine Bullfinch is very similar to our English bird, but is half as large again in size, and is much brighter in colour. It has not yet occurred in the British Islands, where the smaller *Pyrrhula europæa* takes its place, and represents it in Western and Central Europe. In Scandinavia, however, the present species is the only Bullfinch, and ranges throughout Northern Europe into Siberia, whence Mr. Henry Seebohm has received a beautiful series of specimens from the neighbourhood of Kras-no-yarsk; while Mr. Dresser has seen it from the Onon and the Ussuri rivers, where it meets with *Pyrrhula cineracea*. To the southward it is met with during winter occasionally in Germany, Holland, and Belgium, and, according to Messrs. Degland and Gerbe, numbers occurred near Lille in December, 1830. It is also common in Greece in winter, and is likewise found plentifully in Southern Russia.

Mr. Dresser, in his work on the Birds of Europe, states that its habits, mode of nidification, and song are similar to those of its near ally the common Bullfinch; he has received the nest and eggs from Sweden, and can see no difference between the latter and those of the common species, excepting that they are rather larger in size. According to Mr. Collett, it feeds in winter on the seeds of *Sorbus aucuparia*, *Acer platanoides*, *Fraxinus*, *Symphoricarpus*, *Rubus idæus*, *Syringa*, and other bushes and trees. In Norway the eggs are laid towards the end of May, and about the end of June the young leave the nest, and wander about in parties with the old females, the old males being generally found separately. Mr. Collett also states that, like the common Bullfinch, the northern species is subject to melanism, and he has four black specimens in the Christiania Museum.

A full description of the present species is scarcely necessary; for in colour it is almost an exact counterpart of the ordinary English Bullfinch, but is of larger size, has a stouter bill, and more vivid red breast. The measurements are given by Mr. Dresser as follows:—

"*Male*, Total length about 6·25 inch, culmen 0·45, wing 3·8, tail 3·1, tarsus 0·8.

"*Female*. Culmen 0·45 inch, wing 3·75, tail 2·95, tarsus 0·7."

The Plate represents two males and a female, of the natural size. The figures are drawn from a beautiful pair of birds from Western Siberia, presented to me by Mr. Seebohm.

PYRRHULA ERYTHACUS, *Blyth.*

J.Gould & W.Hart del. & lith.

Walter Imp.

# PYRRHULA ERITHACUS, *Blyth.*

## Beavan's Bullfinch.

*Pyrrhula erythaca*, Blyth, Journ. Asiat. Soc. Beng. xxxii. p. 459.—Jerdon, Birds of India, ii. p. 389.—Gray, Hand-list of Birds, ii. p. 99, no. 7483.—Hume, Stray Feathers, 1874, p. 455.—Dresser, Birds of Europe, pt. 51, note to *P. major*.—Hume, Stray Feathers, 1879, p. 108.

*Pyrrhula erithacus*, Blyth, Ibis, 1862, p. 389.—Id. Ibis, 1863, p. 441, pl. x.—Id. Ibis, 1867, p. 43.—Beavan, Ibis, 1868, p. 177.—Tristram, Ibis, 1871, p. 232.

---

This lovely Bullfinch is one of the rarest of the genus *Pyrrhula*, and very few specimens exist in collections. It was discovered by that excellent observer the late Captain Beavan, and was described by Mr. Blyth. Dr. Jerdon, in the 'Birds of India,' calls it the "Red-breasted Bullfinch," an English name which I have not adopted, as there are other Bullfinches which have red breasts, and for which the term would be more appropriate; and I follow Mr. Hume in calling the species by the name of its discoverer, who thus described his meeting with it:—"I came across a flock of this new species on my way up Mount Tongloo in April 1862. There were two males and several females picking about the bushes near the path. The females all escaped; but I secured both the males, though one was too much damaged to preserve; the other I sent to Mr. Blyth, who described it in 'The Ibis' for 1862 (p. 389), and in the following year furnished its portrait ('Ibis,' 1863, pl. x.). This was the only occasion on which I observed the species. The elevation was about 9000 feet." Neither Captain Elwes nor Mr. Blanford met with the bird during their journey through Sikhim; and the only other notice of the species occurs in the volume of 'Stray Feathers' for 1874, where Mr. Hume writes:—"A specimen of that rare Bullfinch *Pyrrhula erythaca* has recently been obtained for me by Mr. Gammie (to whom I have repeatedly owed rare birds and eggs) at Jor Bungala, close to Darjeeling, at an elevation of between five and six thousand feet. As far as I know, this is the first specimen obtained since the late Captain Beavan shot the type on Mount Tongloo. Perhaps others have been met with; and if so I should be glad to learn the localities from and dates on which they were procured.

"Since this was in type Mr. Mandelli has also kindly sent me a specimen of Beavan's Bullfinch, procured in April, also at Sikhim. It would appear that it is only an occasional migrant to Sikhim (just as *Syrrhaptes paradoxus* in England); for we have for years maintained the keenest watch for this species, and heretofore without success. Where can the home of this species be? Swinhoe has not met with it in China, nor any of the Russians in Siberia, nor our people in Yarkand. However, there is a vast country outside all these explorations, to which *P. erythaca* must belong."

I have nothing to add to the above interesting note of Mr. Hume's, as in the sentences I have quoted I believe to be comprised all that we know respecting the species; and I can only re-echo Mr. Hume's hope that more information respecting its habits may soon be forthcoming.

Mr. Blyth's description of the type is as follows:—

"Upper parts pure ashy, like the back of *Pyrrhula vulgaris*, also the front of the neck, becoming whitish on the throat; pectoral region bright red, the abdominal pale ashy, and the lower tail-coverts white; a broad white band on the rump, as in *P. vulgaris*, above which is a slight black band; and the upper tail-coverts and tail are rich purple-black, the middle tail-feathers being $\frac{3}{4}$ inch shorter than the outermost; a black ring encircles the bill, and spreads over the loral region, this ring being bordered and set off with white; wings black, except the smallest coverts, which are grey, and a brownish grey band ($\frac{1}{2}$ inch broad) tipping the greater coverts; no red mark on the tertiaries. Bill black and feet pale. Length of wing $3\frac{3}{8}$ inches, and of tail 3 inches."

The Plate represents two adult males and an old female, all of the natural size.

PYRRHULA CINERACEA. *Gab.*

J. Wolf & W. Hart. del. et lith. Walter Imp.

# PYRRHULA CINERACEA.

## Cinereous Bullfinch.

*Pyrrhula Cassinii*, Cabanis, J. f. O., 1871, p. 318 (nec Baird).
——— *cineracea*, Cabanis, J. f. O., 1872, p. 316.—Dybowski, J. f. O., 1874, p. 41, Taf. i.

---

I BELIEVE that of all the novelties which from time to time attract the notice of ornithologists, those which please us most are the new species of well-known genera, and that a new Bullfinch or Chaffinch, or some such form connected with our first impressions of ornithology, possesses the most interest for the students of this delightful branch of science. I was glad, then, when my friend Mr. Dresser brought me the specimens of the present species, which may fairly be considered one of the most striking of the Bullfinches,—striking, I would say, because of its dissimilarity to the other members of the genus *Pyrrhula*. In most of the Bullfinches the prevailing colours are bright red and grey, with variations towards orange in some of the Himalayan forms; and the grey section of the genus contains but four species—*P. murina* of the Azores, *P. griseiventris* of Japan, *P. Cassinii* of Alaska, and this recently described *P. cineracea* from North-eastern Siberia.

All the Bullfinches are inhabitants of the northern portions of the Old World and are distributed over the whole of the Palæarctic Region, but the maximum development of the genus takes place in the Himalaya Mountains. The subject of the present memoir was discovered by Dr. Dybowski in the country round Lake Baikal, and is one of the most interesting of the novelties brought to light by that indefatigable naturalist. He gives the following note on the species in his recently published notes on the birds of North-eastern Siberia, and these observations are all that we have recorded concerning the habits and economy of the species. In the same country occurs the Russian Bullfinch (*Pyrrhula coccinea*); but, says Dr. Dybowski, "The two species differ considerably in habits and live quite apart from each other, even in localities where both are common. *P. coccinea* keeps always close to the villages, seeking its food near the store-houses, or on the islands of the Onon, or in small groves thinly sprinkled with birch trees. In the neighbourhood of Irkutsk it is found on the road to the Telminsk manufactory. *P. cineracea*, on the contrary, keeps near the dark groves consisting of rhododendron bushes, or in open spaces in the woods covered with high grass; as an exception, and this only in the present winter, a great number of them being driven from the mountain-plains on account of the heavy snow, we found them with *P. coccinea*. In the larch-woods on the hills we never met with the latter, but only with *P. cineracea*.

"*P. coccinea* feeds on different cereal seeds and especially on heath-berries, therefore large flocks may be seen congregating round the store-houses and on the threshed straw. We very seldom found any haw-berries in their stomachs, or seeds of any other plants growing near the villages. *P. cineracea*, on the contrary, feeds principally on rhododendron-berries, living here on the berries of the Daurian rhododendron. The voice of *P. coccinea* is a little harsher and the tone lower, the voice of *P. cineracea* thinner and higher; my unmusical ear could not recognize the exact differences, but my colleague, Mr. Michael Janskowski, can recognize both species by their note and can call them excellently.

"About the breeding of the two species we have as yet only imperfect information. *P. cineracea* breeds in the high mountains about 5000 to 6000 feet above the sea. During our trip which we made to the Baikal Mountains we saw *P. cineracea* flying about in pairs; as, for instance, in the Chamardaban-fields (Naseberg) a pair followed us for a long while, performing the usual manœuvres of lame flight to draw us away from the nest; but neither here nor in other places where we saw them in summer could we find the nest."

*Adult male.*—Above ashy grey, the rump conspicuously white; crown of head, lores, feathers round the eye, and chin black; rest of under surface ashy grey, clearer than the upper surface, and very light on the cheeks and sides of the face and neck; under wing- and tail-coverts white; upper wing-coverts ashy grey like the back, the greater series purplish black at base shading into ashy grey at tip, the outermost whitish at their extremity; quills black, the secondaries shaded with purple, the outer primaries with a very narrow marginal line of whitish; upper tail-coverts and tail purplish black, the latter duller below; bill black; legs brownish; iris dusky brown. Total length 6·5 inches, wing 3·5, tail 2·8, tarsus 0·65.

*Female.*—Similar to the male, but much more dingy grey above, shaded with brown; the under surface much browner. Total length 6·5 inches, wing 3·4, tail 2·9, tarsus 0·7.

The Plate represents the two sexes of this Bullfinch of the size of life.

LOXIA HIMALAYANA, *Hodgs*

J.Gould and H.C.Richter del. et lith.

Hullmandel & Walton, Imp.

# LOXIA HIMALAYANA, *Hodgs.*

## Himalayan Crossbill.

*Loxia himalayana*, Hodgs. in Gray's Zool. Misc. 1844, p. 85.—Id. Journ. Asiat. Soc. Beng., vol. xiii. p. 952.—Id. Proc. of Zool. Soc., part xxxv. p. 35.—Id. Ann. and Mag. Nat. Hist., vol. xvi. p. 206.—Cat. of Spec. and Draw. of Mamm. and Birds pres. to Brit. Mus. by B. H. Hodgson, Esq., p. 111.—Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 123.—Id. Journ. Asiat. Soc. Beng., vol. xxiii. p. 213.—Bonap. et Schleg. Monog. des *Loxiens*, p. 6, pl. 7.—Bonap. Consp. Gen. Av., p. 527, *Loxia*, sp. 5.—Horsf. and Moore, Cat. of Birds in Mus. East Ind. Comp., vol. ii. p. 453.—Gray and Mitch., Gen. of Birds, vol. ii. p. 388, *Loxia*, sp. 5, and vol. iii. App. p. 18, app. to p. 388.

---

The Crossbills constitute a well-defined and isolated group among the *Fringillidæ*, all the members of which are distinguished by having a greater or less amount of red in their plumage, and by the crossing of the tips of their mandibles. In Europe there occur at least three species, and there are two or three others in America. In all probability the whole of the European species enter the confines of Asia; certain it is that the well-known *Loxia curvirostris*, our Common Crossbill, frequents China and Japan; at least, examples from the latter country offer no perceptible difference from others killed in England. Independently of the species above enumerated, there exists in the great Himalayan range of mountains a species which differs from them, and all others known, in its diminutive size. The discovery of this bird is due to Mr. Hodgson, who has transmitted specimens to this country, and thus furnished both the collection at the British Museum and that at the East India House with examples of both sexes. Mr. Hodgson merely states that the bird "inhabits the Cachar only, near the snows, and is rare there."

In point of affinity, both as regards structure and colour, the *L. himalayana* is more nearly allied to the *L. curvirostris* than to any other member of the genus.

The male has the crown of the head, back, scapularies, face, throat, breast, and abdomen fine red, speckled on the back and more faintly on the breast with dark brown; wings and tail dark brown, the latter paler beneath; vent grey; under tail-coverts dark brown, margined with greyish-white; irides hazel; bill and feet pale flesh-colour.

The female differs in having those parts of the upper surface which are red in the male of an olive-green; the throat white, with a crescent of brown in the centre of each feather, and the breast and abdomen yellow with similar crescentic marks of brown.

The figures represent the two sexes, of the full size, or perhaps a trifle larger than the birds really are.

STURNUS UNICOLOR, *La Marm.*

J. Gould & W. Hart. del. et lith.

Walter imp.

# STURNUS UNICOLOR, *De la Marmora.*

## Sardinian Starling.

*Sturnus unicolor*, De la Marmora, Temm. Man. d'Orn. ed. 2, p. 133 (1820).—Dresser, Birds of Europe, 1874, pl. xxvi.

——— *vulgaris unicolor*, Schlegel, Rev. Crit. Ois. d'Eur. p. 57 (1844).

---

I QUITE agree with Mr. Dresser when he says, in his valuable work on the birds of Europe, that the true *Sturnus unicolor* has been erroneously recorded from Scinde, the Punjab, and Cashmere; further than this, I may say that several of our best orthithologists have assigned it a place among the birds of India, where, however, it certainly does not occur. In size all the Starlings are pretty much the same; and a similar law also prevails among them as regards the spotted character of the plumage from youth to maturity; there are, however, infallible characters by which the present bird may be distinguished from the rest—among others, the feathers of the throat being soft and silky, and the under portion of the wing being black. The native country of the *S. unicolor* is Southern Europe, North Africa, and Asia Minor; and Canon Tristram records it from Palestine.

In Italy it is common. Salvadori (J. f. O. 1865, p. 276) writes that:—"he never met with it in the more elevated portions of the country, but always in the plains, where they search for insects with the Crows in damp places. At the close of day they leave the fields and pass the night on roofs of houses. He observed them in the pigeon-caves at Cape St. Elias, near Cagliari, in company with *Columba livia* and *Cotyle rupestris*."

Malherbe (Mém. Ac. Roy. Metz, 1843, p. 133) states that "it inhabits the mountainous districts in the interior of Sicily, and is common at Lentini, Caltagirone, Troina, &c., where it is sedentary; and Lord Lilford found it common and resident in the Island of Sardinia. It has occurred in Malta, as Mr. C. A. Wright writes (Ibis, 1864, p. 56) that "Schembri includes this species, from two specimens shot out of a flock of five or six many years ago." Neither Von der Mühle nor Lindermayer ever observed it in Greece; but Lord Lilford (Ibis, 1860, p. 137) met with it at Corfu.

The figures in the accompanying Plate are of the natural size, and represent a male in summer plumage. The black-billed bird is in the winter dress; or it may be the young in its second dress or immediately after its brown state.

My principal reason for figuring this bird in the 'Birds of Asia' is, to show Indian naturalists what the true *S. unicolor* is really like, so as to avoid in future the chance of its being considered an Indian bird. The figure is of the size of life.

STURNUS HUMII, *Gould.*

J. Gould & W. Hart, del. et lith.

Walter, Imp.

# STURNUS HUMII, *Gould.*

## Hume's Starling.

*Sturnus unicolor* auct. from N.W. India (nec De La Marmora).
——— *nitens*, Hume, Ibis, 1871, p. 410.—Hume & Henders. Lahore to Yark. p. 250, pl. xxiv.—Brooks, Pr. A. S. B. 1871, p. 210.
———, sp., Blanf. East Persia, p. 267.

---

I HAVE already explained my reasons for figuring the true *Sturnus unicolor* in the present work, and I now give an illustration of the bird which has for so long done duty for that species with Indian writers. Mr. Hume has so succinctly stated the differences of the Cashmere Starling that I do not think I can do better than quote his remarks when he described it as *S. nitens* (*l. c.*):—"It appears to be the species that has hitherto been identified with *S. unicolor* of Southern Europe; but it differs most markedly in its brighter tints and smaller size from the only European example with which I have had an opportunity of comparing it. It is this species which is not uncommon in the Peshawer valley, and which breeds in May in the holes of trees in the compounds of the cantonments. It is equally common, I believe, in Kashmir and Afghanistan. Compared with the European bird, the bills are less compressed towards the tips, and looked at from above seem more spatulate towards the end. The birds are slighter and smaller, the wings ranging from 4·6 to 4·9 inches, against 5·2 in the only European specimen I have to compare it with, and the total length being 7·25 to 8·0, against 9·0 inches in the Sardinian Starling. The colours are brighter (recalling the coloration of *Juida*), and the plumage more glossy, while the breast-hackles are narrower and shorter.

"Learning that Gould had figured a new eastern Starling under the name of *S. purpurascens*, I concluded that this must be my *S. nitens*; but having at last had an opportunity of consulting his twenty-second Part of the 'Birds of Asia,' I see that both in plumage and dimensions they differ *toto cælo*. *S. nitens* is absolutely speckless, and is much smaller." Mr. Hume then quotes the description given by me in the present work, and he adds a diagnosis of his proposed new species as follows:—

"*Plumage.*—Face, head, throat, a deep *blue*-purple, the ear-coverts alone having in some lights greenish reflections. Neck all round, upper back and breast a bright ruddy purple. Lower portion of back and upper tail-coverts with a coppery and green gloss. Abdomen black, with a green metallic gloss. Wing-coverts dark green, with, in some lights, a slight golden tinge. Wings with the primaries and their greater coverts and the earlier secondaries towards their bases very narrowly but very distinctly edged with white. Quills greyish brown, outer webs of primaries inside the white edging black, with a narrow band of the same colour at the tip; secondaries and tertiaries similar, but only about the outer half of the outer web black, and the greater portion of this, in fact all but the tips, overlaid with metallic green, the black band at the tips more conspicuous than in the primaries. Under tail-coverts black, with a faint purple and green gloss. The whole bird absolutely spotless.

"I think no one can well doubt that *S. nitens* and *S. purpurascens* are distinct. From *S. vulgaris* as well as the Indian race of this latter no one, again, can well question the distinctness of my new Starling. As to *S. unicolor*, the only specimen I possess, besides being much larger, having a more compressed bill, much longer breast-hackles, larger feet, and stronger claws, altogether lacks the brilliant contrasts of colour so conspicuous in *S. nitens*. My specimen might have been faded; but there is no indication of these contrasts in La Marmora's original description, or in Degland and Gerbe. I really think this is a good species; and I have seen at least fifty specimens of it, all identical.

Mr. Blanford, in his lately published work on the zoology of Eastern Persia, mentions having found this species on two occasions, at Shiraz in June and in the Jaji Rud valley in the Elburz Mountains in August; and Major St. John says it is confined to wooded and garden districts, while the ordinary species is common all over Persia, frequenting the high bare plateaux during summer in large numbers. Mr. Blanford is not convinced of the specific distinctness of the present bird; but he points out that in any case the name *nitens* cannot be maintained, as this title has already been given by Brehm to the Common Starling. I therefore dedicate the species to Mr. Hume, who has done so much to enrich our knowledge of Indian birds.

As far as can be determined at present, the range of the present bird seems to be from Cashmere and Afghanistan, where it is common, to Persia, where it is rarer, being replaced in Armenia by my *Sturnus purpurascens*.

SLURNUS PURPURASCENS, *Gould*.

J.Gould & H.C.Richter del. et lith. Walter&Cohn.

# STURNUS PURPURASCENS, *Gould.*

## Persian Starling.

*Sturnus purpurascens*, Gould, in Proc. of Zool. Soc., 1868, p. 219.

---

Some ornithologists may question the existence of more than two species of true *Sturnus*, viz. *S. vulgaris* and *S. unicolor*, and others consider that the genus, even as now restricted, comprises at least two more. Whatever may be the correct view of the case, those who regard the *S. indicus* as different from *S. vulgaris*, must admit that the present bird has still greater claims to a separate specific appellation; and, at all events, every ornithologist who closely examines these three birds will at least allow that the distinctions pointed out by those who have written respecting them are correct. No naturalist, I imagine, is unaware that some one or more species of every natural genus of birds is very widely distributed, while the remainder are confined to a limited area: such a law appears to govern the Starlings; for the *S. vulgaris*, so widely distributed over Europe, also occurs, like many more of our common birds, in China. Mr. Swinhoe speaks of a specimen in the British Museum which had been sent direct from that country; and I possess another from Fokien, which does not differ, so far as I can see, from British-killed examples. Of *S. purpurascens* I have three fine specimens, all of which were collected at Erzeroum; but I am still ignorant of the extent of the range of the bird over Persia; in like manner, we are unacquainted with the range of the *S. indicus* over India, all that is known on the subject being comprised in the following note by Mr. Blyth:—

"Starlings occur sufficiently near to Calcutta to be sold by the bird-dealers as no rarity, along with Rose Ousels and other birds taken in the neighbourhood. I have been assured they occur commonly so near as at Ránigánge. The Indian Starling differs very slightly from *S. vulgaris*, but has a longer and more acuminate bill. A third race, which Mr. Gould has from Erzeroum, is identical with the Starling of Afghanistan, and more brilliantly coloured than the others. When series of each are seen together, the difference is sufficiently recognizable. The Starling of North-eastern Asia may perhaps constitute a fourth of these closely allied races." ('Ibis,' 1867, p. 38.)

The following remarks accompanied my characterization of this new species in the 'Proceedings of the Zoological Society of London' for 1868, as above referred to:—

"I have had in my collection for many years three skins of a very beautiful Starling, all collected in Erzeroum, two of which are adult and one a yearling bird. Compared with *Sturnus vulgaris* on the one hand and *S. indicus* on the other, this bird will be found to differ in a remarkable manner from both. In size it is considerably larger than either, while in colouring it is sufficiently different to constitute it a new species. Beautiful as is our own Starling, the Erzeroum bird far exceeds it even in its finest nuptial and breeding-dress, the entire back being of a lovely purple, while green is the prevailing tint of that part of *S. vulgaris*; the resplendent bluish green of the wings of the European bird is replaced in the new species by shining coppery red, the lengthened plumes of the chest are bluish green instead of coppery, and the breast is coppery instead of the green or bluish green seen in *S. vulgaris*. The two birds, in fact, present a singular transposition of colouring; and the Erzeroum bird, for which I propose the name of *S. purpurascens*, is, as above stated, by far the finest of the two. The adults, as in *S. vulgaris*, are more or less speckled with white at the tips of the feathers of the back, according to age; and the young of the year presents all the characters of the adult, so far as regards the purple colouring of the back and the bronzy red of the wings, but, as is the case with a specimen of our own Starling of the same age, has the entire plumage very distinctly guttated with white, while the bill, as is usually the case, is of a dark hue."

"Face, head, throat, and neck deep bronze, passing into green on the upper part of the back and breast; lower portion of the back and upper tail-coverts purplish blue; abdomen dusky brown, with a bronzy lustre; wing-coverts deep coppery or bronzy red; wings greyish brown, each feather bordered by a velvet-like line of black, showing very conspicuously on the tips of the secondaries; tail similar, but the velvet edging not so well defined; under tail-coverts black, tipped with white. A few of the feathers on the upper part of the back and on the upper tail-coverts with a spot of white at the tip; bill yellow; feet reddish brown.

"Total length 8½ inches, bill 1¼, wing 5$\frac{3}{4}$, tail 3, tarsi 1$\frac{1}{8}$."

The Plate represents a male and a female in their full breeding-dress, and a young bird of the first autumn, all of the natural size.

AMYDRUS TRISTRAMI, *Sclater*

J. Gould and H.C. Richter del. et lith.

Hullmandel & Walton, Imp.

# AMYDRUS TRISTRAMI, *Sclater.*

## Tristram's Amydrus.

*Amydrus tristramii*, Sclater in Ann. and Mag. of Nat. Hist., 3rd ser. vol. ii. p. 465.—Tristram, Birds of Southern Palestine, in "Ibis," vol. i. p. 32.

---

The discovery by the Rev. Mr. Tristram of this truly African form in Asia Minor is a point of considerable interest to ornithologists; so much so, in fact, that I hasten to give a figure of the *Amydrus Tristrami* in the "Birds of Asia," taken from specimens collected by that gentleman, which he has kindly placed in my hands for the purpose. The following notes from his pen greatly enhance the interest of the subject.

"This handsome bird," says the Rev. H. B. Tristram, "which Mr. Sclater has done me the honour to name after me, I discovered in the Gorge of the Kedron, not far from the Dead Sea. Several pairs were breeding in the rocks among the cells hewn out by the old monks of Mar Saba. In habits and manners they reminded me somewhat of the Grakles of North America, but seem a strictly desert bird. The species ought to be found at Petra, if anywhere. The male has but two notes, but those are of wonderful power and of the richest volume. The roll of his music is something like that of the Organ-bird of Australia, and makes the rocks resound. The nest is placed in inaccessible crevices of the cliffs, and the birds are bold and fearless, allowing a stranger to approach very near while continuing their song, then suddenly breaking off for an instant and renewing it the moment one stands still. The plumage of the female is much inferior in brilliancy to that of the male; but she has the same rich chestnut wings."

Some doubt having arisen in my mind as to the specific value of this bird, the Palestine specimens were submitted to the inspection of Dr. Hartlaub of Bremen, who has paid so much attention to the birds of Africa, and his reply, addressed to myself, was as follows:—

"There cannot be the slightest doubt as to *Amydrus Tristrami* being a good species. It is nearly allied to the *A. fulvipennis*, Swains. (the *Nabourop* of Levaillant), of South and South-western Africa. The size of both species is the same. The differences are the following:—

"1. The beak of *A. Tristrami* is much longer and more robust than that of *A. fulvipennis*; it is also more arcuate. The colour of the beak is *corneous* in the *A. Tristrami*, and decidedly *paler* than that of *A. fulvipennis*, which in my specimen is nearly black.

"2. The tarsi are considerably longer in *fulvipennis* than in *Tristrami*. The only essential difference in the colouring of the two species occurs on the wing-feathers.

| "*A. Tristrami.* | "*A. fulvipennis.* |
|---|---|
| Remiges majores sex primæ pogonio *externo et interno* concolores, pallide fulvæ, SCAPIS in hac parte NIGRIS. | Remiges majores sex primæ pogonio externo *rufæ*, interno *fulvæ*, SCAPIS *in hac parte nitide* ALBIDIS. |

"The *apical part* of these remiges is *in both species blackish*, and the extension of this blackish colour is in both equally or subequally extended. If you want to know anything more about the genus *Amydrus* and its species, I must refer you to my 'Monograph of the *Lamprotornithinæ*' in the last part of Cabanis's 'Journal für Ornithologie,' lately published.

"I cannot say if there be any difference in the colouring of the females of the two species, there being only males of *A. fulvipennis* in our Collection."

The male has the head, upper and under surface glossy purple, duller on the vent; wings and tail dull black, margined with glossy green; primaries cinnamon, largely tipped with blackish brown; bill and feet black.

The female has the head, neck, and throat dark ashy grey striated with black; the remainder of the plumage as in the male, but much paler.

The Plate represents both sexes of the natural size.

UROCISSA CÆRULEA, *Gould*.

*J.Gould and H.C.Richter del. et lith.* *Walter & Cohn, Imp.*

# UROCISSA CÆRULEA, *Gould.*

## Formosan Blue Pie.

*Urocissa cærulea*, Gould in Proc. of Zool. Soc., 1862, p. 282.—Swinh. in Ibis, 1863, p. 384.

It will be seen by the number of species of Blue Pies figured in the present work, that this genus of birds forms a very conspicuous feature in Asian ornithology. The *Urocissa erythrorhyncha* of Nepaul and the *U. sinensis* of China are the oldest-known members of this lovely form, to which modern research has added the *U. magnirostris* from Siam, the *U. flavirostris* from Sikim, the *U. cucullatus* from Kulu, and the *U. cærulea* from the Island of Formosa. The last-mentioned new and beautiful species is nearly equal in size to the *U. magnirostris*, but differs from that and all the other members of its genus in its remarkably intense blue colouring.

The following is Mr. Swinhoe's account of the *U. cærulea*, as given by him in the volume of the 'Ibis' for 1863, above referred to:—

"Soon after my arrival at Tamsuy, some hunters I had sent into the interior returned with the two long tail-feathers of a bird which they said they had shot, but were obliged to eat, as, owing to the heat of the weather, it was getting tainted. They called it the *Tung-bay swannium*, or Long-tailed Mountain Nymph. I saw, from the peculiar form of the feathers, that the bird from which they had been taken must have been a *Urocissa*, and, from their bright-blue tint and large white tips, I felt sure they belonged to a fine new species. I was much excited, and offered large sums for specimens, and consequently soon received an ample supply, an examination of which satisfied me that I had obtained a new and beautiful addition to this lovely group of birds.

"The Mountain Nymph is by no means uncommon in the large camphor-forests of the mountain-range. It is there to be met with in small parties of six or more, flying from tree to tree, brandishing about their handsome tail-appendages, and displaying their brightly contrasted black, azure, and white plumage, and their red bill and legs, among the deep-tinted foliage of the woods. They are shy birds, soon taking alarm at the approach of a stranger, giving warning to each other in loud notes, and then gliding away one after another, with a straight flight, into an adjoining tree, the flight being executed with short, quick flaps of the wings, while the body and tail are held nearly horizontal. They feed on wild figs, mountain berries, and insects, chiefly Melolonthinæ Coleoptera. I had no opportunities of observing the nesting of this bird, nor the plumage of the young, which in the *U. sinensis* differs considerably from that of the adult.

"In the large size and bulkiness of its bill, this species is more nearly allied to the *U. magnirostris* of Pennasserim than to the *U. sinensis* of China; but its tail is shorter than that of either of those birds, and its plumage is entirely different to the similarly distributed tints of the other described species.

"The male has a larger bill, and somewhat longer wings and tail, than the female; but both sexes vary a good deal in proportion *inter se*. In the older specimens, the *tomiæ* of the upper mandible are often worn into a serrated appearance.

"The head, hinder part of the neck, throat, and breast black; body, both above and below, dusky-purplish azure; wings brownish black; the outer webs of the primaries and secondaries, and the greater part of the tertiaries, of the same colour as the back, with a large white spot at the tip of each quill, becoming smaller and obscure on the last primaries; under surface of the wings marked with rufous; upper tail-coverts broadly margined with black, preceded by a whitish shade, and in some cases tipped with white; two central tail-feathers somewhat spatulate at the tip, with turned-up sides, the *spatulæ* white, the remainder purplish azure, with black shafts; the second tail-feather with a much smaller white tip, preceded by a broad black band, the black increasing in extent, and the white of the tips slightly decreasing on the other lateral feathers; bill bright red-lead, paler at the tip; legs and feet also bright red-lead, the sole-pads light and dingy; claws light reddish brown; inside of the mouth flesh-colour; iris clear light king's yellow, somewhat pearly in appearance; eyelid blackish brown, with a narrow outer rim of orange-red colour."

The Plate represents this bird, nearly of the size of life.

PROCISSA OCCIPITALIS.

J. and J. and W. Wolter del. et lith.

Hullmandel & Walton Imp.

# UROCISSA OCCIPITALIS.

## Nepaulese Blue Pie.

*Pica erythrorhyncha*, Vig. in Proc. of Comm. of Sci. and Corr. of Zool. Soc., part i. p. 173.—Gould, Century of Birds, pl. 41.

*Cyanurus erythrorhynchus*, Hodgs. in Gray's Zool. Misc. 1844, p. 84.

*Psilorhinus sinensis*, Gray, Cat. of Spec. and Draw. of Mamm. and Birds pres. to Brit. Mus. by B. H. Hodgson, Esq., p. 101.

——— *albicapillus*, Blyth, Journ. Asiat. Soc. Beng., vol. xv. p. 28, young.

*Urocissa albicapillus*, Cab. Mus. Hein., p. 87, note.

*Psilorhinus occipitalis*, Blyth, Journ. Asiat. Soc. Beng., vol. xv. p. 26.—Hutton, Journ. Asiat. Soc. Beng., vol. xvii. part ii. p. 681.—Adams in Proc. of Zool. Soc., part xxvi. p. 479.

*Urocissa occipitalis*, Cab. Mus. Hein., p. 87, note.—Adams in Proc. of Zool. Soc., part xxvii. p. 172.—Gould in Proc. of Zool. Soc., part xxvii. p. 200.

---

If this be not the oldest known species of this elegant and truly Indian group of Pies, it is the one most generally seen in the museums of Europe. To say that it is more beautiful than its near allies would scarcely be correct, as the species of this genus are all equally elegant in their form and equally lovely in tints: these charming members of the family Corvidæ must indeed form conspicuous objects among the foliage of the forest trees of Upper India, and the landscape be greatly enlivened by their presence.

We have much yet to learn respecting the true habitats of the various species of the genus *Urocissa*, each of which evidently enjoys a range over a distinct part of the country without encroaching on the others' territory. Of the three species inhabiting the temperate regions of the southern slopes of the Himalayas, the present would appear to frequent the middle or Nepaulese country, the *U. cucullata* the more western districts to the north-west of Simla, and the *U. flavirostris* Sikkim and Bhotan.

The *U. occipitalis* may be at once distinguished from the *U. flavirostris* and the *U. cucullata* by the spotted character of the feathers of the forehead and the rich red colouring of the bill. There are still two other species bearing even a greater resemblance to this bird, namely, the *U. Sinensis* and the *U. magnirostris*; from the former of these it differs in the lighter colouring of the nape and in the greater extent of the white tipping of the tail-feathers, and from the latter by the much smaller size of its bill.

Captain Hutton states that "This species occurs at Masuri throughout the year, collecting into small parties of four to six during winter. It breeds at an elevation of 5000 feet, in May and June, making a loose nest of twigs externally, lined with roots. The nest is built on trees, sometimes high up, at others about eight or ten feet from the ground. The eggs are from three to five in number, of a dull greenish ash-grey, blotched and speckled with brown dashes, confluent at the larger end. Diameter $1\frac{4}{16} \times \frac{13}{16}$ inch; the ends nearly equal in size. The bird is very terrene in its habits, feeding almost entirely on the ground."

Dr. Adams informs us that this species "is not uncommon in the jungles and woods of the lesser ranges round Simla and Kussowlee," that "the habits of the bird resemble those of the Magpie," and that "the presence of a cheetah, or a bird of prey, is often discovered by the chattering of these beautiful creatures."

The Hon. F. J. Shore says, "A specimen of this bird which I kept in captivity, though it refused other food, ferociously pounced upon living birds, presented to it by way of experiment, and eagerly devoured them. Seen among the foliage of the trees, it is an elegant and conspicuous object, flitting from bough to bough, with long and flowing tail, and full of vivacity in every movement."

The sexes are so much alike in size and colouring that it is impossible to distinguish them without the aid of dissection.

Bill and legs orange-red; forehead and crown black, with a spot of white at the tip of each of the feathers of the latter; cheeks, sides of the neck, throat and breast black; occiput and back of the neck white; all the upper surface dull purplish blue; shoulders and the outer webs of the primaries and secondaries fine blue, their inner webs brownish black; all the secondaries crescented with white at the tip; primaries margined along the middle portion of their outer web with bluish white, and with a small linear mark of white near the tip; upper tail-coverts dull blue at the base, fading into bluish white towards their apices and largely tipped with black; middle tail-feathers blue, largely tipped with white; the next on each side blue, not so largely tipped with white as the middle ones, the blue and the white separated by an imperfect band of black blending posteriorly with the blue; the four lateral feathers are blue at the base and white at the tip, the two colours being separated by a broad and distinct band of deep black; immediately behind this black band, a triangular white mark occurs on the inner web, which gradually increases in extent until on the outer feather it forms an oblique band across both webs; all the under surface creamy white with a very faint wash of blue.

The Plate represents the bird about three-fourths of the size of life.

PROCISSA SINENSIS.

Daniel Lord del. et lith.

Hullmandel & Walton imp.

# UROCISSA SINENSIS.

## Chinese Blue Pie.

*Cuculus sinensis*, Linn. Syst. Nat., tom. i p. 171.—Ib. Gmel. edit., tom. i. p. 418.—Briss. Orn., vol. iv. p. 157, tab. 14 A. fig. 2.—Id. 8vo. tom. ii. p. 85.—Lath. Ind. Orn., vol. i. p. 217.

*Sanhia de la Chine*, Buff. Hist. Nat. des Ois., tom. vi. p. 389.

*Chinese Cuckow*, Lath. Gen. Syn., vol. ii. p. 530.—Shaw, Nat. Misc., pl. 277.—Lath. Gen. Hist., vol. iii. p. 273.

*Coracias melanocephalus*, Lath. Ind. Orn., vol. i. p. 170.—Shaw, Gen. Zool., vol. vii. p. 397.

*Black-headed Roller*, Lath. Gen. Syn. Supp., p. 86.—Ib. Gen. Hist., vol. iii. p. 82.

*Corvus erythrorhynchos*, Gmel. edit. Linn. Syst. Nat., tom. i. p. 372.—Lath. Ind. Orn., vol. i. p. 161.—Daud. Orn., tom. ii. p. 240. pl. 15.—Shaw, Gen. Zool., vol. vii. p. 381.

*Geay de la Chine*, Buff. Hist. Nat. des Ois., tom. iii. p. 115.—Ib. Pl. Enl., p. 622.

*La Pie bleue*, Le Vaill. Ois. d'Afriqe, tom. ii. p. 24. pl. 27.

*Psilorhinus sinensis*, Gray and Mitch. Gen. of Birds, vol. ii. p. 308, *Psilorhinus*, sp. 4.—Blyth, Journ. Asiat. Soc. Beng., vol. xv. p. 27.

*Calocitta sinensis*, Bonap. Consp. Gen. Av., p. 381, *Calocitta*, sp. 1.

*Urocissa sinensis*, Cab. Mus. Hein., p. 87.—Horsf. and Moore, Cat. of Birds in Mus. East Ind. Comp., vol. ii. p. 577.—Swinh. in Ibis, vol. iii. p. 43.—Gould in Proc. of Zool. Soc., part xxvii. p. 200.

*Red-billed Jay*, Lath. Gen. Syn., vol. i. p. 390.—Id. Supp., vol. ii. p. 112.—Ib. Gen. Hist.,vol. iii. p. 27.

---

The species here represented is one of those so frequently brought under our notice in Chinese drawings, in some of which it is figured with remarkable truthfulness, while in others the artist has taken certain liberties; but the bird is too conspicuous, both in form and colour, to be mistaken for any other, however inaccurately it may be delineated. It must be a very conspicuous object in the woodland districts of China, where it evidently takes the place of the *Urocissa occipitalis* of India and Nepaul. From this well-known species it differs in several particulars: first, in the more decided markings of the tail, and the lesser amount of the white tipping of all the feathers of this lengthened and conspicuous organ; and secondly, in the blue colouring of the nape of the neck, by which it may be at once recognized.

But little has been recorded respecting the habits and economy of this important and strikingly coloured group of birds, consequently I have much pleasure in transcribing the note published by Mr. Swinhoe in the third volume of 'The Ibis,' referred to above.

"These handsome birds," says Mr. Swinhoe, "are often to be seen about the woods at Hongkong. You see a long-tailed form flying over the low trees with a direct flight, executed by short constant flaps, like that of a Magpie, the tail being held in nearly the same horizontal line as the body. The first disappears into a thick leafy tree, and is followed by a second, then a third and fourth, and sometimes more. Presently one shows himself on an exposed branch above, stretching out his red-billed head and whisking impatiently his two white-tipped tail-streamers. He sees you watching him, and at once sets up a cry of '*pink-pink-pink*,' followed by a loud chatter, in which his comrades join, and you catch glimpses of violet and blue as they hasten from one tree to another in a contrary direction, until the distant sound of the '*pink-pink*' note tells your ear that the Redlegs are far through the woods."

At the present moment (March 1861) a living example of this bird is to be seen in the Gardens of the Zoological Society of London. It has been recently received from China; and although not in such health and vigour as could be wished, will, I doubt not, under the fostering care of the Society's superintendent, soon show signs of amendment, and become a conspicuous ornament to their Menagerie.

I am indebted to John R. Reeves, Esq., for the fine examples of this species from which my figures were taken; and I feel that I should be wanting in courtesy were I not cordially to acknowledge my obligations to this gentleman, and to his late respected father, for the kindness and liberality with which they have at all times aided my scientific pursuits, and honoured my works with their support.

The sexes are alike, and may be thus described:—

Forehead and crown black, with a spot of pale bluish white on the tip of the central feathers of the latter; cheeks, sides of the neck, throat, and breast black; occiput and back of the neck pale bluish white; all the upper surface dull purplish blue; shoulders and the outer webs of the primaries and secondaries fine blue, their inner webs brownish black; all the secondaries crescented with white at the tip; the primaries margined along the middle portion of their outer web with vinaceous, and with a small oblong mark of white at the tip; upper tail-coverts dull blue at the base, fading into much paler blue towards their apices, and largely tipped with black; middle tail-feathers blue tipped with white; the lateral feathers blue at the base and creamy white at the tip, the two colours separated by a broad band of black, which decreases in breadth as the feathers recede from the centre; immediately behind this black band a large triangular mark of white occurs on the inner web, which in like manner decreases in size as the feathers recede from the centre; all the under surface creamy white washed with blue; bill and legs orange.

The Plate represents the bird about three-fourths of the size of life.

UROCISSA MAGNIROSTRIS.

H.Gould and W.C.Richter del. et lith.

Hullmandel & Walton Imp.

# UROCISSA MAGNIROSTRIS.

## Great-billed Blue Pie.

*Psilorhinus magnirostris*, Blyth, Journ. Asiat. Soc. Beng., vol. xv. p. 27.—Ib. Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 93.

*Urocissa magnirostris*, Cab. Mus. Hein., p. 87, note.—Gould in Proc. of Zool. Soc., part xxvii. p. 200.

---

Mr. Blyth, of Calcutta, has the merit of first discerning the differences which exist between the present and the other known species of *Urocissa*; and the specific term of *magnirostris* assigned to it by this gentleman is, and ever will be, a very appropriate one, unless another species should be discovered with a still larger bill. Mr. Blyth states that its native habitat is the Ya-ma-dong Mountains, which separate Aracan from Pegu; but that it is not confined to that locality is certain, for I have at this moment before me a specimen with an imperfect tail, which was sent to me direct from Siam by Sir Robert Schomburgk, Her Britannic Majesty's Consul at Bankok. In this bird, then, we have a very distinct species of *Urocissa* inhabiting a country far away from the hilly regions of Upper India, to which nearly all the other members of the genus are confined. It is not only in the larger size of its bill that the *U. magnirostris* is distinguished from its red-billed congeners, it also differs from them in the diminutive size of the patch of white at the nape of the neck, and in the almost total absence of white spots on the feathers of the crown. Subsequently to the publication of his original description of the species, Mr. Blyth was inclined to consider that he was wrong in separating it from *U. occipitalis*; the bird, however, sent from Siam by Sir Robert Schomburgk is decidedly different from that and every other species I have yet seen.

The sexes of this and the other members of the genus are so much alike, both in size and colouring, that it is impossible to determine, from an examination of their external characters only, which is the male and which the female.

Head, sides of the neck, cheeks, throat and breast black; at the back of the neck a small patch of white; all the upper surface brownish blue; shoulders and the outer webs of the primaries and secondaries fine blue, their inner webs brownish black; all the secondaries crescented with white at the tip; central primaries margined along the middle portion of their outer web with white, and with a small patch of white at the tip; upper tail-coverts dull blue at the base, succeeded by a band of bluish white, beyond which the tip is black; middle tail-feathers blue tipped with white; lateral feathers blue at the base tipped with creamy white, the two colours separated by a broad band of black, decreasing in breadth as the feathers recede from the centre; immediately behind this black band a triangular mark of white occurs on the inner web, which in like manner decreases in size as the feathers recede from the centre; in the outer feather this mark, tinged with blue, is continued in an oblique direction on the outer web; all the under surface creamy white faintly washed with blue; bill and legs orange.

The figure is about three-fourths of the natural size. The plant is the *Thunbergia coccinea*.

UROCISSA FLAVIROSTRIS.

J. Gould and H.C. Richter, del. et lith.

Hasselmandel & Walton, Imp.

# UROCISSA FLAVIROSTRIS.

## Yellow-billed Blue Pie.

*Psilorhinus flavirostris*, Blyth, Journ. Asiat. Soc. Beng., vol. xx. p. 28.—Ib. Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 93.

*Calocitta flavirostris*, Bonap. Consp. Gen. Av., p. 381, *Calocitta*, sp. 3.

*Urocissa flavirostris*, Cab. Mus. Hein., p. 87.—Horsf. and Moore, Cat. of Birds in Mus. East Ind. Comp., vol. ii. p. 578.—Gould in Proc. of Zool. Soc., part xxvii. p. 200.

---

Here at least we have a bird which the most sceptical of ornithologists must admit to be specifically distinct from the other Blue Pies of India and China, *U. occipitalis* and *U. sinensis*,—its much duller colouring, combined with its bright yellow bill, its lengthened and slenderly-formed tarsi, and the absence of all spotting on the crown, being characters which are surely sufficient to indicate its individuality; Mr. Blyth's indications, however, of the points of difference, which I give below word for word, will be the best evidence on this point. Of course, it would be useless to compare it with either of the red-billed species; nor can it, in my opinion, be confounded with the bird to which I have given the name of *U. cucullata*. It is true that both the *flavirostris* and *cucullata* have yellow bills, but there, as will be seen on reference to the figures and descriptions of the two species, their similarity ends.

In pointing out the specific differences of this bird, Mr. Blyth says, "General plumage of a *much* duller colour than in the preceding (*occipitalis*); the bill of the recent specimen bright yellow, and the white of the occiput reduced to a narrow *transverse* band, with a broad collar of black below it, surrounding the hind-neck, and never any white tips to the feathers immediately above it; legs and toes small and slender."

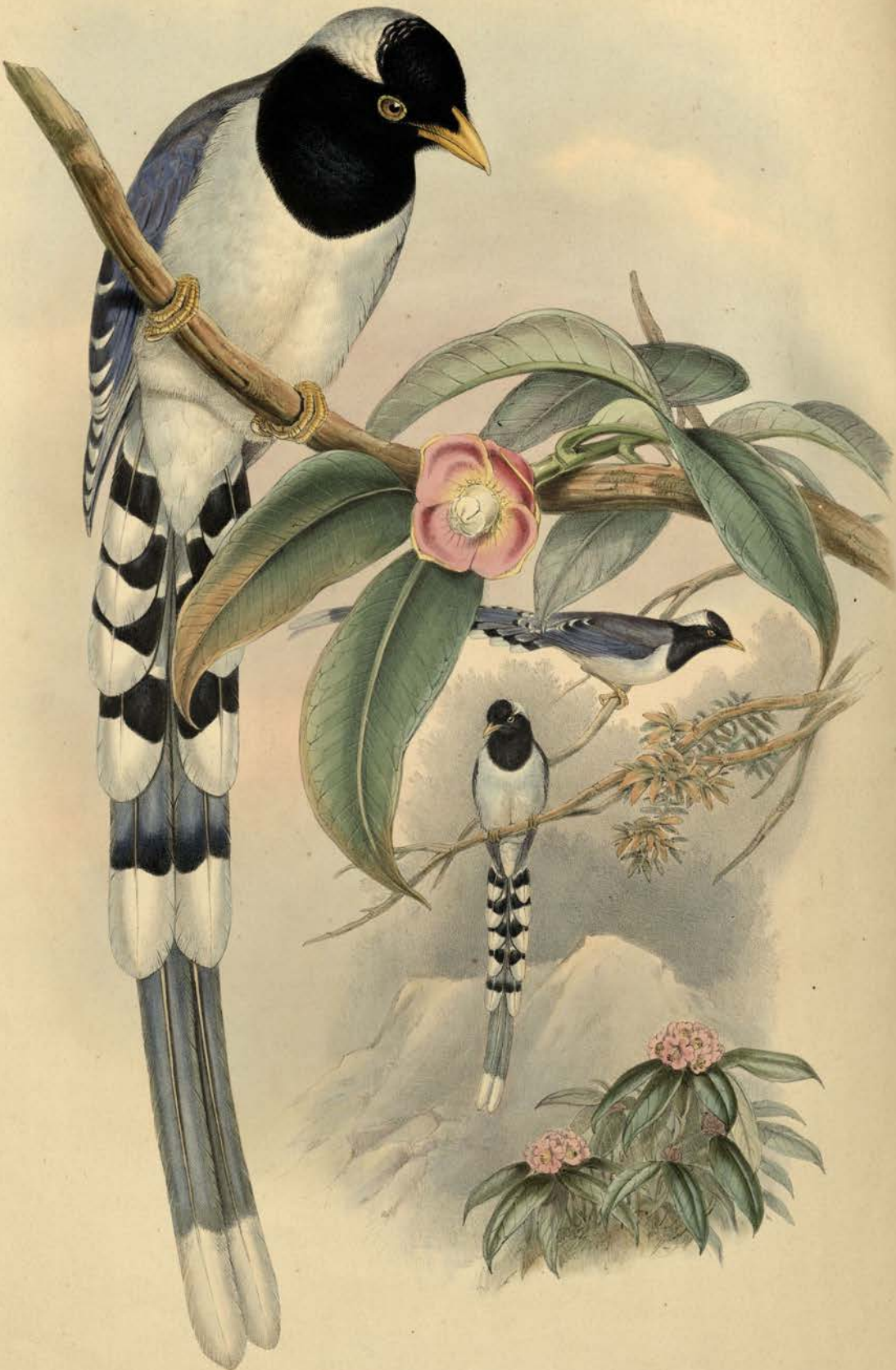
The native countries of the *Urocissa flavirostris* are Sikkim and Bhotan.

The vast primæval forests of the southern slopes of the Himalayas, extending over an area embracing many degrees of longitude, must still contain an abundance of undiscovered stores for the student of zoology; for if we find such conspicuous objects as the members of the genus *Urocissa* differing in countries only a few degrees apart, there also will be found numerous species of more diminutive birds, insects, and mammals which at present are entirely unknown to us.

The sexes are alike in size and colouring.

Head, neck, throat and breast black; within the black at the back of the neck a crescentic mark of bluish white; all the upper surface dull bluish brown; wings dull brownish blue; the inner webs of the primaries and secondaries brownish black; all the secondaries crescented with white at the tip; primaries margined with dull brownish white and with a small oblique mark of white at the tip; upper tail-coverts dull blue tipped with black, behind which is a narrow transverse line of bluish white; two centre tail-feathers blue tipped with white; the remainder blue tipped with white, the two colours separated by a broad band of black, immediately behind which is a mark of white, which gradually expands into a wide band crossing both webs as the feathers recede from the centre; under surface dull bluish white; bill and legs yellow.

The Plate represents the bird about three-fourths of the size of life.



UROCISSA CUCULLATA, *Gould*

J. Gould and H.C. Richter del. et lith.

Hullmandel & Walton, imp.

# UROCISSA CUCULLATA, *Gould.*

## White-capped Blue Pie.

*Psilorhinus flavirostris*, Adams in Proc. of Zool. Soc., part xxvi. p. 479.
*Urocissa flavirostris*, Adams in ib., part xxvii. p. 172.

---

I do assure my readers that I have no desire unnecessarily to increase the number of species of this or any other group of birds; on the other hand, I shall never shrink from pointing out such species as I may see reason to believe are distinct from those previously described, which may occur in any of the various forms I have undertaken to investigate. It might be considered doubtful by many persons whether two birds so closely allied, or resembling each other, as the *U. occipitalis* and *U. cucullata* are really different, but I am satisfied that I am correct in so considering and publishing them. To what cause such slight differences as they present are attributable is a question upon which zoologists will, I expect, be for a long time at variance.

In the form and the tipping of the central and other tail-feathers, this species, which is one of the most elegant and beautiful of the *Urocissæ*, most nearly resembles the *U. occipitalis*; but it differs from that bird in its bright yellow bill, and in the black cowl-like hood which occupies the crown of the head. Its shorter and less slender legs, and the lighter hue of the body, are also characters by which it may be distinguished from the yellow-billed species, to which the name of *flavirostris* has been given. I wish it to be understood that I am writing these remarks with abundant materials before me wherewith to institute comparison, namely, fully adult examples of all the known species of the genus, among which are particularly fine specimens of the present bird, presented to me by Captain Michael Tweedie, of the Royal Artillery, who killed them at Kooloo, a district which lies, I believe, a little to the north of Simla. Captain Tweedie informs me that the bird inhabits the elevated forests of this part of India, and also the north-western provinces, and that he believes it to be a migrant or summer visitant of those regions.

In a letter to Mr. Blyth, Lord Arthur Hay remarks, "It is very curious that, though the Red-billed Jay is found alone at Simla, I should have procured only the Yellow-billed one after leaving Jummoo, and in Cachemere." On this passage, Mr. Blyth remarks, that by the red-billed bird his Lordship intended *U. occipitalis*, and by the yellow-billed one, *U. flavirostris*; but I have no doubt that his remark really has reference to the bird here figured. Dr. Adams informs us that this species replaces the *U. occipitalis* in the mountains of Cashmere, that it is often met with on the banks of the Jhelum, and that its habits are similar to those of the other species. Capt. Strachey's bird from Kamoan, referred to by Dr. Horsfield and Mr. Moore, is probably identical with the present bird.

Crown black, with a few of the posterior feathers margined at the tip with white; at the nape of the neck a patch of white; cheeks, sides of the neck, throat, and breast black; upper surface bluish brown; shoulders and outer webs of the primaries and secondaries fine blue, their inner webs brownish black; all the secondaries crescented with white at the tip; primaries margined obliquely with bluish white, and with a narrow line of pure white at the tip, increasing in breadth but diminishing in length as the feathers approach the body; upper tail-coverts blue tipped with black, posterior to which is a fine transverse line of bluish white; two centre tail-feathers blue largely tipped with white; the next on each side blue tipped with white, and with a narrow band of black separating the two colours; the remainder blue largely tipped with white, the two colours separated by a broad deep band of black, immediately behind which is a mark of bluish white, which becomes narrower, longer, and of a purer white as the feathers recede from the centre; all the under surface creamy white, with a slight wash of blue; bill and legs rich lemon-yellow.

The Plate represents the bird about three-fourths of the size of life. The plant is the *Garcinia Mangostana*.

CRYPSIRINA CUCULLATA, *Jard*

J.Gould and H.C.Richter del. et lith.

Walter & Cohn, Imp.

# CRYPSIRHINA CUCULLATA, *Jerd.*

## Hooded Crypsirhina.

*Crypsirhina* (*Temia*) *cucullata*, Jerd. in Ibis, vol. iv. p. 20.

---

No one of Mr. Jerdon's discoveries has interested me more than the bird figured in the accompanying Plate, inasmuch as it is new to science, and of a very curious form. Every ornithologist is well acquainted with the old *Crypsirhina varians*, and not less so with the members of the genus *Dendrocitta*; to both these forms the present bird is very nearly allied, but particularly to the latter, so much so that it is a question whether it should not be placed in that genus. In structure it is, in fact, directly intermediate between the two, the form of the bill being precisely similar to that of *Dendrocitta*, while in the number of its tail-feathers and the silky character of its plumage it assimilates with the type of the genus *Crypsirina*—*C. varians*.

"The tail," remarks Mr. Jerdon, "is much graduated, and, as in its congener *Crypsirhina* (*Temia*) *varians*, consists of ten feathers. Compared with that bird, the tail-feathers, judging from a drawing I have, are much narrower, and the broad termination more marked. The bill also appears to be comparatively shorter.

"I found this neatly plumaged little Magpie not rare at Thayetmyo, in Upper Burmah. It was generally seen singly, now and then in pairs, wanders about a good deal in low jungle, and feeds on grasshoppers, locusts, Mantides, and the like. I have seen it catching white ants as they issued from their nest in the winged state, with considerable dexterity, returning usually to the same perch. It breeds early, I imagine; for I killed young birds in June. They differ from the old ones in having the hood dusky ashy instead of black. A native Shikaree assured me that it occasionally perched on the backs of cattle, to devour the insects that often infest them."

Lores, a broad band at the base of the upper mandible, and a narrow line at the base of the lower one deep velvety black; remainder of the head and upper half of the neck glossy greenish black; immediately behind this dark colour is a broad band of greyish white, which blends posteriorly into the ashy grey of the upper and under surface; wing-coverts and tertiaries, spurious wing, primaries, and secondaries deep dull black, a few of the latter margined with white, forming with the pale edges of the wing-coverts a light stripe along the wing; four outer tail-feathers ashy grey, becoming gradually paler until they are nearly white at the tip; two centre tail-feathers dull black; iris very dark glaucous blue; bill black, except at the basal portion of the edge of the upper mandible and the base of the lower one, where it is pale yellow; legs brownish black.

The Plate represents the bird in two positions, on the *Thibaudia pulcherrima*.

CISSA PYRRHOPTERA.

# CISSA PYRRHOCYANEA.

## Red and Blue Cissa.

*Corvus pyrrhocyaneus*, Licht. in Mus. Berlin.
*Cissa puella*, Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 93 ?

---

During a visit to Berlin in the year 1843, my valued friend Professor Lichtenstein called my attention to an Indian bird in the Zoological Museum of the University of that city, to which was attached the name of *Corvus pyrrhocyaneus*: the bird interesting me much, I immediately made a sketch of it, and subsequently was permitted, by the kindness of the authorities of the University, to bring the specimen to London for the purpose of accurately figuring it. At that time it was the only example in Europe, and nothing farther was known respecting it than that it was from India; lately, however, another and far finer example (the Berlin specimen wanting the two middle tail-feathers) has come under my notice, in a small collection of birds brought to this country in 1848 by Aubrey J. D. Paul, Esq., who informed me that the bird inhabits Ceylon, and that his specimen was one of a pair that passed over him while shooting on the banks of the Killarneyganga. Mr. Paul added, that this rare bird frequents the hilly districts clothed with dense forests of large jungle, at an elevation of fifteen hundred feet above the sea level, is seldom seen in the plains, and gives utterance to a loud noise while flying.

On examining the "Catalogue of the Birds in the Museum of the Asiatic Society, Calcutta," recently published by that indefatigable ornithologist Mr. Blyth, I find that he has named a species of this genus from Ceylon, *Cissa puella*, which it is possible may be identical with the bird here represented; but as Mr. Blyth's description, which was intended to appear in the "Journal of the Asiatic Society of Bengal" for the present year, has not yet, I believe, reached Europe, I am unable to determine this point, and have consequently not ventured to substitute his name of *puella* in lieu of that given by Dr. Lichtenstein, although it is probably the first published; in which course I am sure Mr. Blyth will admit I am right; for if both be still manuscript names, that of *pyrrhocyanea* has the priority.

In form and size the *Cissa pyrrhocyanea* is very nearly allied to the Hunting Crow of Latham's Gen. Hist. vol. iii. p. 53, but is readily distinguished from that bird by the very different style of its colouring.

Head, neck, and outer webs of the primaries and secondaries dull chestnut-red; wing-coverts, spurious wing, and inner webs of the primaries and secondaries deep blue; upper and under surface dark verditer blue, deepest on the upper part of the back, the front of the neck and thighs; tail dull greenish blue, passing into black near the extremity, and largely tipped with white; bill carmine; irides red or reddish hazel; eyelashes, which are much developed and carunculated, and legs carmine.

The figure is of the natural size.

CISSA VENATORIA.

J. Gould and H.C. Richter del. et lith.

Hullmandel & Walton Imp.

# CISSA VENATORIA.

## Hunting Cissa.

*Corvus Sinensis* and *C. speciosus* of the older authors?
*Kitta venatoria*, Gray in Hardw. Ill. Ind. Zool., vol. i. pl. 24.
*Corapica Bengalensis*, Less. Traité d'Orn., p. 353.
*Cissa venatoria*, Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 92.
*Hunting-Crow*, Lath. Gen. Hist., vol. iii. p. 53.
*Kitta venatoria*, Bonap. Consp. Gen. Av., p. 166, *Kitta*, sp. 3.
*Cissa sinensis*, Gray, List of Spec. and Draw. of Mamm. and Birds presented to Brit. Mus. by B. H. Hodgson, Esq., p. 101.

---

It will be seen that I have followed Prince Charles L. Bonaparte and the author of the "Catalogue of the Birds in the Museum of the Asiatic Society at Calcutta," in applying Mr. Gray's specific appellation of *venatoria* to this beautiful bird, of which I have never yet seen an example from China; if, then, it be not a native of the 'Celestial Empire,' the term *Sinensis* would surely be most inappropriate; and it is quite certain that the figures and descriptions of Brisson, Latham and the older authors do not accurately depict or describe it.

The native habitat of the Hunting Cissa is Nepaul, and the south-eastern parts of the Himalayas; it is also said to be found in Assam, Arakan and Tenasserim. The colouring of its plumage, both of the body and wings, seems to be very evanescent, the beautiful emerald-green of the body of newly-moulted birds giving place to glaucous blue, and the chestnut-red of the primaries to brown on exposure to light: on this point Mr. Blyth remarks,—"This bird, when newly moulted, is of a lovely green, with the wings bright sanguine-red, and the bill and legs deep coral; but whether alive (wild, or in confinement) or mounted as a stuffed specimen and exposed to the light, the green soon changes to verdigris-blue, and the red of the wings to dull ashy..... I have had many of these birds alive," says this gentleman, "and I observe that they combine in their manners, traits both of the Jay and of the Shrike: they are very amusing, soon become tame and quite fearless, are very imitative, sing lustily a loud and screeching strain of their own with much gesticulation, and are highly carnivorous in their appetite. The Shrike-like habit, in confinement, of placing a bit of food in each interval betwixt the bars of their prison, is in no species more strongly exemplified than in this."

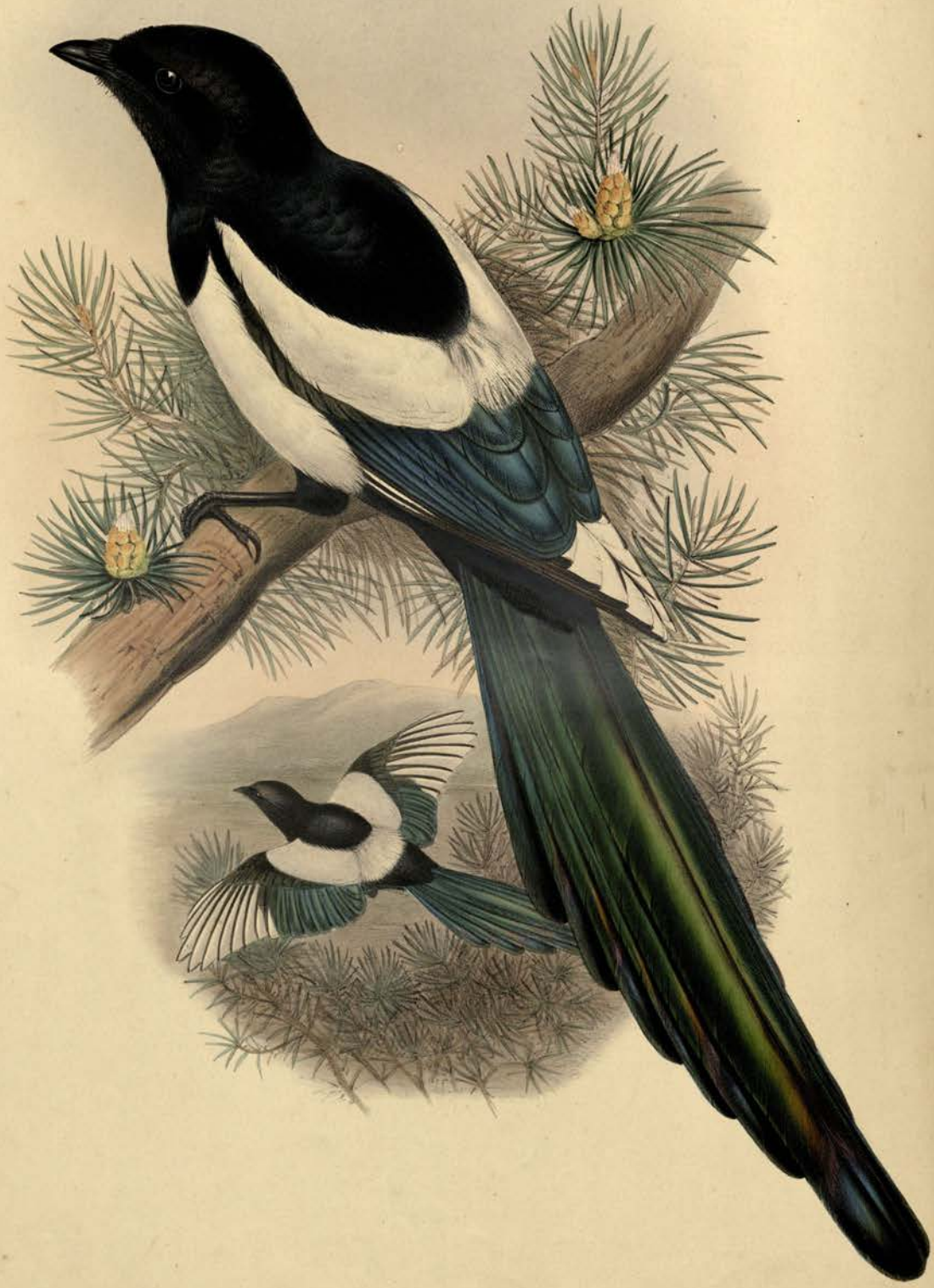
Dr. F. B. Hamilton informs us that it inhabits the hills of Tipperah and Sylhet; that it is said to be instructed to hunt like a hawk to catch small birds, and that, besides a kind of chattering like a Jay or Magpie, it has an agreeable note and becomes very tame.

A fine specimen of the Hunting Cissa lived for a considerable time in the Gardens of the Zoological Society of London, where it was a most attractive object, and it is to be regretted that it is not more frequently sent to Europe; for its transmission cannot be a matter of difficulty, as it bears confinement as well as any other of the Corvine birds, while at the same time it forms one of the most beautiful birds for the aviary that could be selected.

Among the numerous specimens that have come under my notice I have failed to detect any marked difference, and I am therefore led to conclude that the sexes are similarly clothed.

Plumage of the head, crest, upper and under surface of the body pale grass-green, somewhat lighter beneath than above, and with a wash of yellow on the forehead; wing-coverts grass-green; remainder of the wings rich chestnut-red, except the apical portions of the innermost quills, which are first grey, then crossed by a broad irregular band of black, and finally tipped with bluish-grey; central tail-feathers light grass-green, fading into grey at the tip, and with dark brown shafts; lateral tail-feathers green at the base, the apical half being bluish-grey, crossed near the tip by a broad band of black; a broad stripe of jet-black commences at the nostrils, surrounds the eye and, passing backwards, unites at the occiput; bill bare; skin round the eye, legs and feet fine red; irides crimson.

The Plate represents a newly-moulted male, and a bird in the faded colouring above mentioned. The plant is the *Beaumontia grandiflora* of Dr. Wallich.



PICA LEUCOPTERA, *Gould*

J. Gould and H.C. Richter del. et lith.

Walter & Cohn, Imp.

# PICA LEUCOPTERA, *Gould.*

## White-winged Magpie.

*Pica leucoptera*, Gould in Proc. of Zool. Soc., Jan. 28, 1862.

---

For a knowledge of this very fine species of Magpie I have to thank my friends the Messrs. Verreaux of Paris, who were so good as to forward a specimen to me for the purpose of its being figured in the present work. In a letter I have received from M. Jules Verreaux, that gentleman states that the bird was sent to him by M. Taczanowski of Warsaw, who had received it from Oriental Siberia, where he informed him it was not more rare than the Common Magpie is with us. Unfortunately, only three examples were procured —the person who shot them believing them to be identical with our well-known bird; he observed, however, that the eggs, though very similar, were larger than those of the *Pica caudata*.

Before naming and figuring this fine bird, I carefully compared it with all the Old-World species of this form, and found that it differs from the *Pica caudata* in having a much longer tail, a pure-white mark across the lower part of the back, and white primaries, and from *P. Bactriana*, its most near ally, in having a smaller bill and the whole of the inner webs of the primaries pure white, their tips showing most conspicuously when the wings are closed (a feature not observable in any other known species)—and hence the specific name of *leucoptera* I have applied to it. However trifling these differences may appear, they are regarded by the ornithologist with much interest, as we find that they are constant; that is, that the European bird never assumes characters intermediate between its own and those of the Asia bird on the east, that of Africa (*P. Mauritanica*) on the south: the species in all these countries are different; and, further, if we compare the Magpies of the northern portions of America with those of the Old World, we find that these again are different, and constitute two well-marked species—the *Pica Hudsonica* and *P. flavirostris*. Ornithologists, therefore, have no alternative but to regard them as so many species; for no characters will apply to the whole of them.

Head, neck, breast, lower part of the abdomen, under and upper tail-coverts, and thighs deep black; scapularies, a broad band across the lower part of the back, abdomen and flanks pure white; greater wing-coverts bronzy green; primaries pure white, except their outer webs, which are olive-brown; secondaries blue, with a stripe of bronzy green down their outer webs; the greater part of their inner webs are black, as are also the under surface of the shoulder and the axillaries; two centre tail-feathers and the outer webs of the four next on each side beautiful green for about four-fifths of their length, when they become of a fiery purple, then deep blue, and lastly bluish green, these rainbow-like hues forming a rich zone towards the end of the tail; inner webs of all the lateral feathers black, the exterior web of the outermost green; irides, bill, legs, and feet glossy black.

The front figure represents the bird of the natural size.

PICA BACTRIANA, *Bonap*

Gould and H.C. Richter, del. et lith. Walker & Cohn, Imp.

# PICA BACTRIANA, *Bonap.*

## Affghan Magpie.

*Pica caudata*, Blyth, Journ. Asiat. Soc. Beng., vol. xv. p. 26.—Id. Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 91.—Hutton, Journ. Asiat. Soc. Beng., vol. xvi. p. 778.

—— *bactriana*, Bonap. Consp. Gen. Av., tom. i. p. 383.—Horsf. and Moore, Cat. of Birds in Mus. East Ind. Comp., vol. ii. p. 550.

*Akha*, Cabul, Hutton.

---

It has often struck me that the more stupendous the mountain-ranges, the larger and more powerful are the animals frequenting them, whether mammals, birds, or insects; and I could, were it necessary, adduce many instances in confirmation of this being the case; but I will here merely mention that, of the numerous species of true Magpies forming the well-defined genus *Pica*, those inhabiting the high lands of the Old World, known as the Himalayan and Thibetan ranges, are much larger and finer than those of other countries. Of these larger and finer species the present bird is an example. It bears a general resemblance to the common *Pica caudata* of Europe and the *P. leucoptera* of Siberia; but on a careful comparison with those birds, it is found to present several points of difference: it is larger and more powerful than either of them; its correspondingly large tail is even more highly coloured; its rump is crossed by a very distinct band of white; and the white on the primaries is of greater extent than in its European ally, but not so extensive as in *P. leucoptera*; in all other respects the three birds are very similar.

Of the *P. bactriana* I have numerous specimens now before me from Affghanistan and Thibet, which countries appear to be the head-quarters of the species, and where it performs the same offices, and exhibits the same habits, manners, and disposition, that our own bird does in Europe, the *Pica media* in China, the *P. leucoptera* in Siberia, and the *P. Hudsonica* and *P. flavirostris* in America.

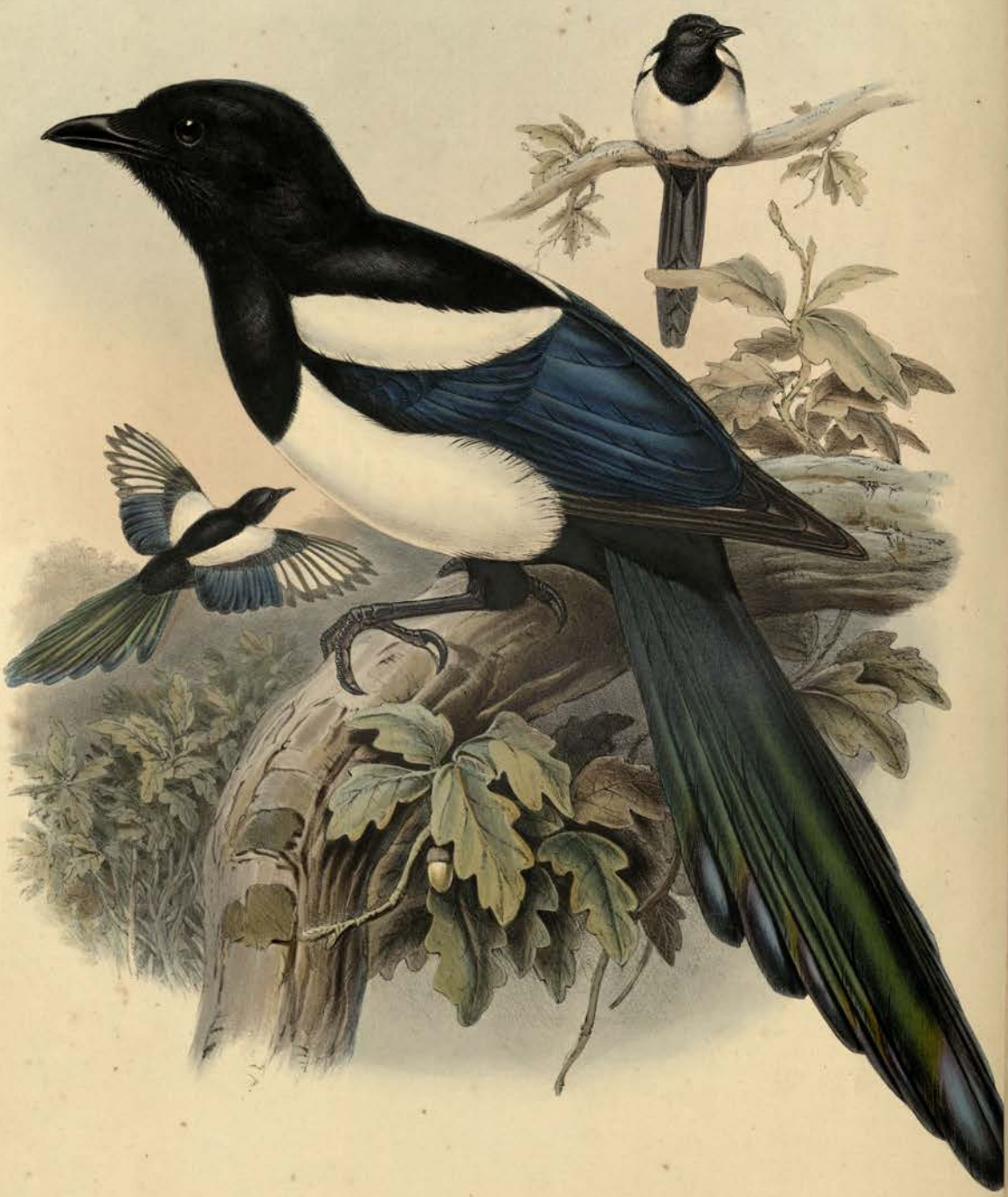
"The Afghan Magpie," says Captain Hutton, "is found all the year round, from Quettah to Giriskh, and is very common. They breed in March, and the young are fledged by the end of April. The nest is like that of the European bird, and all its manners are precisely the same."

A very fine series of these birds is contained in the collection at the India Museum, Scotland Yard; and my thanks are due to the Secretary of State for India and to Mr. Moore for the use of them in furtherance of the present work.

Crown black, slightly glossed with green; remainder of the head, neck, back, and breast black; the throat-feathers open in texture, and terminating in a bristle; scapularies, abdomen, flanks, and a band across the lower part of the back pure white; upper and under tail-coverts, vent, and thighs black; lesser wing-coverts black; greater coverts, spurious wing, secondaries, and tertiaries glossed with green and blue, and a few of the secondaries with a stripe of yellowish green along the centre of their outer webs; outer webs of the primaries, their tips, and the margin of the apical portion of the inner webs dark bronzy green; the inner webs, with the exception of the apical portion of their margins, pure white; two centre tail-feathers rich bronzy green nearly to the end, when that colour passes into rich purple, then blue, and lastly bluish green; the lateral feathers are similarly coloured on their outer webs and at the tip of their inner webs, the basal portion of the latter being black, glossed with blue; irides blackish brown; bill, feet, and legs black.

Total length 21 inches; bill 2; wing of specimens from Ladakh from $7\frac{3}{4}$ to $8\frac{1}{4}$; tail 13; tarsi 2.

The front figure represents the bird of the size of life.



PICA BOTTANENSIS, *Delessert*

Hewitt and R.C. Nichols del. et lith.

Walter & Cohn, Imp.

# PICA BOTTANENSIS, *Delessert.*

## Bootan Magpie.

*Pica bottanensis*, Deless. Rev. Zool. 1840, p. 100.—Id. Voy. dans l'Inde, pt. 2. p. 30.—Blyth, Journ. Asiat. Soc. Beng., vol. xii. p. 985, vol. xv. p. 25.—Id. Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 91.—Gray and Mitch. Gen. of Birds, vol. ii. p. 314.—Horsf. and Moore, Cat. of Birds in Mus. East Ind. Comp., vol. ii. p. 551.

—— *megaloptera*, Blyth, Journ. Asiat. Soc. Beng., vol. xi. p. 193.

—— *butanensis*, Bonap. Consp. Gen. Av., tom. i. p. 383.

—— *tibetana*, Hodgs. Ann. Nat. Hist., vol. iii. new ser. p. 203?

---

Of the various Magpies forming the genus *Pica*, there are four or five which bear a striking resemblance to each other, and are unquestionably very nearly allied; and there are two others which every ornithologist, however sceptical he may be as to the value of minute specific differences, must admit possess well-defined characteristics, namely, the *Pica Mauritanica* of North Africa and the *P. Bottanensis* of India. Both these birds have not a trace of the white mark across the rump, and both have so much less white on their primaries that during flight their expanded wings present a very different appearance from those of the other members of the genus; the Bootan Magpie is moreover distinguished by having a shorter and more rounded tail. Examples of this interesting bird may be seen in the collections at the British and India Museums.

Mr. Blyth has placed his *Pica megaloptera* in the rank of a synonym of this species, and Mr. Moore considers that the *P. Tibetana* of Mr. Hodgson is also identical with it; but, for my own part, I am inclined to doubt this being the case, as, upon examining the type specimen from which Mr. Hodgson took his description, and which still exists (though in a bad state of preservation) in the India Museum, I observe that it differs from the Magpie of Bootan in having a much less amount of white on the primaries, the dark colouring of the tip occupying not less than 2¼ inches of their length, while in the Bootan birds it scarcely exceeds ⅜ of an inch. I have therefore placed a mark of doubt after the reference to Mr. Hodgson's bird, as it may prove to be a distinct species, and beg to call the attention of ornithologists to the difference I have pointed out. Time, and the acquisition of a greater number of examples will determine whether there be more than one species of these black-backed Magpies inhabiting the high lands of India.

Like the other members of the genus, the sexes of this species do not differ in colouring. No account of their habits and economy has been placed on record; but in these respects they doubtless closely assimilate to their allies.

Crown of the head black, slightly glossed with green; remainder of the head, neck, back, breast, lesser wing-coverts, rump, upper and under tail-coverts, and thighs black; scapularies, abdomen, and flanks white; greater wing-coverts and spurious wing oil-green; basal portion of the outer webs of the primaries oil-green, the apical portion of these webs and the tips of both webs dark olive; inner webs white, broadly margined on the apical portion with dark olive; secondaries dull black on the internal web, and deep steel-blue on the outer, a few of them margined at the base with yellowish green; tertiaries glossed with green and blue; two central tail-feathers bronzy green nearly to the end, when that colour passes into rich purple, then blue, and lastly bluish green; the lateral feathers are similarly coloured on their outer webs and at the tip of their inner webs, the basal portion of the latter being black, glossed with blue; irides blackish brown; bill, feet, and legs black.

The Plate represents the bird as nearly the natural size as may be; if there be any difference, it is a trifle less.

GARRULUS TAÏVANUS, *Gould.*

J. Gould and H.C. Richter, del. et lith.

Walter & Cohn, Imp.

# GARRULUS TAÏVANUS, *Gould.*

## Formosan Jay.

*Garrulus Taïvanus*, Gould in Proc. of Zool. Soc. 1862, p. 282.—Swinh. in Ibis, 1863, p. 386.

---

The true or typical Jays are confined, or nearly so, to the northern regions of the Old World. Two very distinct species inhabit Europe, our well-known bird being one of them; North Africa is frequented by two others, which do not visit Europe; while India, China, and Japan possess three, if not four, more.

The new species, from the Island of Formosa, here figured is nearly allied to the Himalayan *Garrulus bispecularis* and the Chinese *G. sinensis*, but is at once distinguished from both by its black frontal band and its much smaller size. Of the *G. Taïvanus* Mr. Swinhoe remarks:—

"This small mountain species represents, in Formosa, the Jay that frequents the hill countries of South China, from Canton to Ningpo—*G. sinensis*, Gould. The Formosan Jay has a comparatively larger bill, and is at once distinguishable from its Chinese congeners by its much smaller size, by its black frontal band from nostril to nostril, by its whitish ring round the eye, by the somewhat different arrangement of blue, white, and black tints on the wings, and by the greater extension of white on the margins of the primary quills. Though the members of this genus are somewhat migratory, yet their peregrinations are always within a limited sphere; and wherever the Jay occurs in isolated localities, we meet with aberrations from the typical form.

"I have only one pair from Formosa; but the characters I now proceed to define are constant.

"General plumage light vinaceous, greyish on the back and scapularies, and delicately barred on the crown with a deeper shade; rump-band and upper tail-coverts white; tail black; abdomen and vent white; feathers over the nostrils and round the base of the bill black; round the eye a ring of white feathers; quills black, the second primary margined for nearly its whole length with white, the third to a less extent, the fourth less still, until the inner ones have scarce any indication of it; the secondaries for more than the basal half of their outer webs barred with white, blending into deep blue and then black, in consecutive order; primary coverts and winglet similarly barred, but more closely, the black bars being broader; the foremost secondary coverts bluish grey, finely barred with indistinct black and blue striæ; lesser coverts vinaceous brown, broadly tipped with a rufous hue of the same; the rest of the wing black; under shafts of the quills and rectrices pale ochreous brown; bill bluish grey for rather more than the basal half; apical portion black; irides light clear blue; legs light ochreous brown, with brown claws."

The Plate represents this new Jay of the natural size.

NUTIFRAGA MULTIPUNCTATA: *Gould.*

J. Gould and H.C. Richter del et lith.

Bellenden del. & Walton Imp.

# NUCIFRAGA MULTIPUNCTATA, *Gould.*

## Many-spotted Nutcracker.

*Nucifraga multipunctata*, Gould in Proc. of Zool. Soc., February 27, 1849.

---

The discovery of a new species of a group so limited in the number of its members as the genus *Nucifraga*, will I am sure be regarded by every ornithologist with no ordinary degree of interest; and it certainly affords me much pleasure to introduce to their notice the fine bird here represented, with which I first became acquainted while engaged in making a catalogue of the collection of birds belonging to the Philosophical Society of York, to the Council of which I am indebted for permission to describe and figure it in the present work. The only information I could obtain respecting the specimen was, that it had been received from India with a few other birds, one of which being the rare *Carduelis Burtoni* described by me in the "Proceedings of the Zoological Society of London" for 1837, we might reasonably infer that the same habitat was common to the whole. While these sheets were being prepared for the press, a second example, together with other specimens of *Carduelis Burtoni*, has come under my notice in a collection of Indian birds just sent to this country, the greater part of which had been made at Simla and in Afghanistaun, which, until we obtain more positive information on the subject, may be regarded as the native habitat of this fine Nutcracker.

The *Nucifraga multipunctata* exceeds in size both the *N. Caryocatactes* and *N. hemispila*, but at the same time has a smaller and more slender bill than either of those birds; it also differs from both of them in its lengthened and cuneiform tail; it has a greater quantity of white on the apical portion of the tail-feathers than the European species, but less than is found in the *N. hemispila*; the white markings of the back and the entire under surface are also much larger and more numerous than in either of the other species, and are most remarkably developed on the scapularies; unlike the other species also, these white markings are as conspicuous on the thighs as on the other parts of the under surface.

Crown of the head and nape of the neck brownish black; feathers of the face, sides of the neck, back, chest and abdomen brownish black, with a broad and conspicuous mark of dull white down the centre; wings glossy greenish black, the coverts and secondaries with a lengthened triangular mark of white at the tip, a faint trace of a similar mark appearing on the tips of the primaries; tail glossy greenish black, the two centre feathers slightly, the next on each side more largely, and the remaining three extensively tipped with white, the extent of the white increasing as the feathers recede from the centre; under tail-coverts white; upper tail-coverts and thighs striated with white.

The figures are of the natural size.

PODOCES BIDDULPHI. *Hume.*

Henicke & W. Hart. del. et lith.

Walter Imp.

# PODOCES BIDDULPHI, *Hume.*

## Biddulph's Podoces.

*Podoces Biddulphi*, Hume, Stray Feathers, ii. pp. 503, 529.

---

In adjoining Plates I have figured two remarkable species of *Podoces*, which were discovered during the first British expedition to Yarkand; and I have now the pleasure of bringing before the notice of ornithologists a beautiful member of the genus which forms part of the natural-history collections made during the second mission of Sir Douglas Forsyth to Kashgar. This grand novelty was discovered by Captain John Biddulph, 19th Hussars, who was attached to the expedition; and it most appropriately bears his name. We have therefore four species of this interesting genus now known to science, all of which are illustrated in the present work; and one cannot but regard these birds with interest when we consider their extreme rarity in collections, and their restricted range. They are eminently typical of the great desert region of Central Asia, lying to the north of our own possessions in India, and stretching from Persia as far as Mongolia and Amoor-land.

Mr. Hume, whose account of the bird I herewith transcribe, has noted the characters of the species so well that I cannot do better than quote his words. He writes:—"This, the finest of the four Chough Thrushes as yet known to me, was procured during the second Yarkand expedition by Captain Biddulph, after whom I have named it. He was the only one of the party who saw it in a wild state. He obtained it in January at 'Maralbashi;' later Dr. Stoliczka purchased a caged specimen in Yarkand.

"In size, general tone of colouring, and appearance this species resembles both *P. Hendersoni* and *P. Panderi*; but it is distinguished from both at once by its conspicuous white tail, as well as by many other minor differences which will become apparent from the following description. I should add that, although both Captain Biddulph's specimens are females (and the females in this genus appear to be smaller and to have smaller bills than the males), the bills are considerably larger than those of the male *P. Hendersoni*.

"The following are the measurements taken from the skin:—length 11·5 inches; wing 5·9; bill at front 2·0, covered for 0·4 inch by frontal plumes; tail from vent ·4, the exterior tail-feathers on either side 0·3 shorter than the rest; fourth and fifth primaries equal and longest, sixth primary 0·1, third 0·18, second 0·65, and, first 0·85 shorter than the longest; tarsus 1·93; hind toe and claw 0·87, claw only 0·4; mid toe and claw 1·2. The bill, legs, and feet are black, the narial tufts vinaceous fawn-colour.

"The lores, a band under the eye not quite extending to the posterior angle, a broad streak over the eye extending to the ear-coverts, ear-coverts, and sides of the neck pale vinaceous fawn-colour; chin and throat of the same colour, but mottled with dull black from the bases of the feathers showing through, just as in some of the black-throated *Saxicolæ* in winter plumage, leading one to suspect that in summer these parts may be black; base of the lower mandible and a broad moustachial patch, as well as an ill-defined stripe running upwards from this behind the eye and then backwards over the ear-coverts and dividing these from the long supercilium, dull black; forehead, crown, and occiput black, strongly glossed with steel-blue, the feathers of the occiput narrow, pointed, and prolonged to form a short full demi-crest; entire mantle, including lesser and median wing-coverts and rump, a rich vinaceous fawn-colour, much the same as in *Garrulax bispecularis*; winglet pure white; greater-primary and secondary-coverts black, strongly glossed with blue; primaries, ninth and tenth entirely pure white, except at the extreme bases on the inner webs, where they are brownish black; eighth primary similar, but with the terminal half-inch brown and the basal portion of the shaft brownish. The rest of the primaries white, with the whole of the tips and the shafts blackish brown; secondaries white-tipped for about a quarter of an inch, and the inner webs brownish black; the first secondary with the entire outer web white, the rest with the outer webs black strongly glossed with steel-blue; the tertiaries with the inner webs white, and in each feather a decreasing breadth of black, glossed with blue, on the outer webs.

"Upper tail-coverts white, tinged with vinaceous fawn; tail-feathers white, the central pair strongly tinged towards the margins with vinaceous fawn, and with a conspicuous blackish brown shaft-stripe; the lateral tail-feathers faintly tinged with vinaceous on the exterior margin, less and less so as they recede from the centre; the pair next the central ones with conspicuous black shafts, which black shafting becomes less and less marked as the feathers approach the exterior of the tail; the entire lower surface of the body pale vinaceous fawn, paling still further towards the vent and lower tail-covents, which latter may be said to be

white, merely tinged with this colour; axillaries brownish black; wing-lining about the carpal joint white, the greater primary, lower coverts, and the coverts of the ulna blackish brown."

More recently he observes:—"Since my description of *Podoces Biddulphi* was printed, I have had the opportunity of examining a male of this species. In plumage it does not differ from the female, but it is a somewhat larger bird and has a conspicuously larger bill. The following are the measurements of a male, taken from the dried skin—length 12 inches, wing 6, tail from vent 4·3, bill at front (covered for nearly 0·4 inch with dense plumes) 2·2, tarsus 1·9, mid toe and claw 0·97."

I cannot conclude this article without expressing my acknowledgments to Colonel Biddulph, of the War Office, because without his kind assistance I could not have included this species (discovered by his brother) along with the other three *Podoces*.

The principal figure in the Plate is of the size of life, and is taken from the type in Captain Biddulph's collection.

PODOCES HENDERSONI. *Hume.*

Gerald & W. Hart. del. et lith.

Walter. Imp.

# PODOCES HENDERSONI, *Hume.*

## Henderson's Podoces.

*Podoces Hendersoni*, Hume, Ibis, 1871, p. 408.—Hume & Henderson, 'Lahore to Yarkand,' p. 244, pl. 22 (1873).

---

The rarity of *Podoces* in collections has always invested this form with peculiar interest; for the typical species, *P. Panderi*, remained for many years almost unknown to naturalists, and is at present very scantily represented in the museums of Europe. The discovery of a new and finer species was therefore of very great interest, and the first expedition to Yarkand will always be remembered by ornithologists on this account.

I must refer for full descriptions of the species to the above-quoted work of Messrs. Henderson and Hume, contenting myself with an extract therefrom relating to the habits of the bird, from the pen of the first-named author. Dr. Henderson observes:—

"This species was found in the desert ground after leaving Sānju, *en route* to Koshtak, and also near Oi-Tograk. They always kept in pairs, and moved from one sand hill to another, seemingly searching for insects in the sand. The stomachs, however, were filled with grain, picked out of the horse-dung found in the road.

"They habitually fluttered and flapped about in the sand, laving their feathers in it after the manner of fowls, or like some of our Babblers (*Malacocerci*), commonly called in India 'Dust-birds.' The Turki name 'Kum-tuché' is said to mean 'sand-bird.' There was hardly a trace of vegetation in the localities in which they occurred, and they were always seen on bare hillocks of drift-sand. They were met with on several occasions, and always in similar localities. Mr. Shaw, who had seen them on his previous journey to Yarkand, said that they were good eating."

The original description of Mr. Hume is so good that I reproduce it here, and will merely add that my figure is taken from the typical example now preserved in the British Museum, to the authorities of which institution I am indebted for ready access to this valuable specimen.

"*Male.*—Tail, quills (except a broad white bar), the greater coverts, and the whole top of the head and nape black, with a metallic purplish-blue lustre; most of the feathers of the head with a minute rufescent white speck at the tip; all the primaries with a very broad white bar extending from near the bases to near the tips, and, except on the first primary, occupying the outer as well as the inner webs; the rest of the plumage somewhat pale Jay-colour, a mixture of pale rufous and fulvous fawn, with, especially on the back and rump, a vinaceous tinge, becoming paler beneath and albescent on the chin, cheeks, and lower tail-coverts. Total length 11·5 inches; bill at front 1·5; wing 5·4; tail 4·2; tarsus 1·6."

The principal figure in the Plate represents the species of the size of life.

PODOCES PANDERI, *Fischer.*

J.Gould & W.Hart del. et lith.

Walter Imp.

# PODOCES PANDERI, *Fischer.*

## Pander's Podoces.

*Podoces Panderi*, Fischer, Mém. Imp. Soc. Nat. Mosc., v. pl. 21.—Bp. Consp., i. p. 388.—Sharpe, P. Z. S., 1870, p. 334.—Cab. J. f. O. 1873, p. 63, Taf. iii. figs. 37, 38.
*Corvus Panderi*, Eversm. Reis. Buch. App., p. 126.
*Pica Panderi*, Wagl. Syst. Av., *Pica*, sp. 17.
*Garrulus Panderi*, Gray, Hand-l. B., ii. p. 3 (1870).

---

Although many years have elapsed since this fine species was first described, it still remains one of the rarest kinds of birds known, and not half a dozen examples are as yet to be seen in the galleries of European museums. As far as I know, only one specimen has ever been sent to England, and from that bird my present Plate has been drawn. I owe the opportunity of portraying this remarkable species to the liberality of Lord Lilford, in whose collection the bird remains. His Lordship may be congratulated on the acquisition of this rarity, though it could be wished that it were in better condition.

Structurally *Podoces* reminds us of *Pastor*, and it resembles the members of the latter genus in its style of coloration. Four species of the genus have been discovered, and all of them are inhabitants of the great desert region which stretches across Central Asia. From the inaccessibility of their habitat little is known of their habits; and the few notes reproduced below are, I believe, all that has been recorded respecting the economy of *Podoces Panderi*.

Dr. Eversmann brought back one specimen from his Buchara expedition, this being the bird noted by Lichtenstein, Bonaparte, and Cabanis as existing in the Berlin Museum, where for a long time it was the only one known. He observes, "One example was shot during our upward journey in the beginning of December in the Desert of Kisilkum." He gives at the same time a very minute description of the species. Severtzoff has more recently met with it during his journey to Turkestan; and the late Professor Fedtschenko discovered the eggs of the present species while travelling through the last-mentioned country. These were exhibited by Dr. Cabanis at a meeting of the German Ornithological Society held on the 10th of October, 1872, when the following note was given respecting the *Podoces*:—"The birds were found nesting in the Steppes on low trees, the nest being placed about the height of a man from the ground. The cry of *Podoces* is remarkably loud and like that of a *Garrulax*."

The accompanying description has been taken from Lord Lilford's specimen:—

*Adult.*—General colour clear grey; the forehead, eyebrow, and a circlet of feathers round the eye white; in front of the latter a triangular patch of black; ear-coverts a little lighter grey than the crown; least wing-coverts grey like the back, the greater series white, with black bases; primary coverts externally white, black at base of inner web; primaries pure white, except towards the ends, which are black, as also the shafts of the quills; the secondaries white, the bases black, shaded with metallic green, this black colour increasing diagonally on the secondaries and occupying nearly the whole of the innermost, excepting a small patch of white at the extreme tips; upper tail-coverts entirely black, shaded with metallic green; throat white; fore neck black, forming a conspicuous patch; rest of under surface of body suffused with a blush of pale pink; the abdomen and under tail-coverts white; under wing-coverts pure white, the base of the quills black, forming a bar right across the wing; bill horn-colour; legs brown. Total length 9 inches, culmen 1·3, wing 4·7, tail 4, tarsus 1·9.

The figures are the size of life.

PODOCES HUMILIS, *Hume.*

# PODOCES HUMILIS, *Hume.*

## Dingy Podoces.

*Podoces humilis*, Hume, Ibis, 1871, p. 408.—Hume & Henderson, 'Lahore to Yarkand,' p. 247, pl. 23 (1873).—Hume, Stray Feathers, ii. p. 452.

---

I AGREE with Mr. Hume in referring this plain-coloured bird also to the genus *Podoces*; but it lacks the ornamental colouring of *P. Hendersoni* and *P. Panderi*. As will be seen below, it is a bird of somewhat different habits to the other species, and is further distinguished by a difference in the length of bill in the two sexes.

The following short note by Dr. Henderson (*l. c.*) gives all that is known respecting the habits of this curious species:—

"This strange bird was only seen above Kitchik-Yilák, on the way to Yarkand; on the return journey it was not met with. It frequents short grassy downs, at a height of about 1100 feet. They were not in flocks, but were scattered all over the hill-side."

More recently, Mr. Hume has recorded this species from the borders of Sikkim. His original description is given below, and figures of the bill and wings will be found in the elaborate work above referred to.

"*Male.*—Forehead, lores, and an indistinct streak over the fore part of the eye fulvous white; front, top, and back of the head, back, scapulars, and rump a dull earthy brown; a broad yellowish-white patch upon the nape; the four central tail-feathers blackish brown, tipped and margined with a paler hue; lateral tail-feathers white, tipped and margined on exterior webs with dingy fulvous; wings brown, the quills slightly darker brown, narrowly margined and tipped with paler brown; lower parts dingy fulvous white. Total length 7·5 inches; bill at front 0·97 to 1; wing 3·75; tail 2·8; tarsus 1·25."

Mr. Hume adds:—"The female has more of a rufescent tinge on the back and scapulars than the male, and has the quills a darker hair-brown, the tertiaries and some of the secondaries more distinctly margined with a pale rufescent brown. In both sexes the bastard wing appears to be a dark hair-brown. Total length 7 inches; bill from front 0·75; wing 3·55; tail 2·4; tarsus 1·3. It will be noticed that the female is smaller in most of her dimensions, and has the bill conspicuously shorter."

The birds are represented in the Plate of the size of life.

PITTA BENGALENSIS.

J.Gould & H.C.Richter, del et lith.

Walter, Imp.

# PITTA BENGALENSIS.

## Bengal Pitta.

*Coturnix bengalensis*, Albin, Birds, vol. i. pl. 31.
*Corvus brachyurus*, Linn. Syst. Nat., 1766, vol. i. p. 158.
—— ——— *bengalensis*, Gmel. edit. Linn. Syst. Nat., vol. i. p. 376, var. γ.
*Turdus triostegus*, Sparrm. Mus. Carls., pl. 84.
—— *malaccensis*, Scop. Faun. et Flor. Insub.
*Myiothera brachyura*, Cuv. Règn. Anim., 1817, tom. i. p. 356.
*Pitta bengalensis*, Vieill. Ency. Méth. Orn., 2nde partie, p. 685.—Jerd. Birds of India, vol. i. p. 503.
—— *brachyura*, Less. Traité d'Orn. p. 394.—Gould, Cent. of Himal. Birds, pl. 23.
—— *coronata*, G. R. Gray, Hand-list of Birds, part i. p. 294.
—— *triostegus*, Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 157.
*Brachyurus bengalensis*, Bonap. Consp. Gen. Av., vol. i. p. 254, *Brachyura*, sp. 9.—Elliot, Mon. Pitt. pl. vi.
——— *coronatus*, Elliot, Syn. of Pitt., Ibis, 1870, p. 414.
*Turdus coronatus*, Müll. Natursyst., Anhang, p. 144?
*Short-tailed Pye*, Edw. Glean. of Nat. Hist., pl. 324.
*Shum shah* of the Bengalese. *Nou rung* of the Hindoos, *i. e.* nine-coloured bird. *Pona-inka* of the Telugus.

---

This appears to be the earliest described species of a beautiful family of Old-World birds—the *Pittidæ*, or Ant-Thrushes,—all the members of which, with the exception of a solitary species confined to a limited area in Africa, inhabit India, China, and the numerous islands to the southward as far as Australia, but not Polynesia or New Zealand.

The distribution of the present species over India is so very general that Mr. Blyth says it is found throughout the whole of the country, from the Himalayan region to Ceylon inclusive, but never on the eastern side of the Bay of Bengal.

Although the Bengal Pitta is so common all over India, very little has been recorded respecting its habits and economy, and, as far as I can learn, nothing whatever as to its nidification, the number and colour of its eggs, &c.; but I trust these desiderata will soon be supplied by some of the many gentlemen who have of late years turned their attention to the ornithology of the East.

In Mr. Jerdon's 'Birds of India' it is stated that "this prettily plumaged Ground-Thrush is common in the Indian forests, but is also occasionally met with in every part of the country that is tolerably wooded. In the Carnatic it chiefly occurs in the beginning of the hot weather, when the land-winds first begin to blow with violence from the west: and the birds in many instances appear to have been blown by the strong wind from the Eastern Ghats; for, being birds of feeble flight, they are unable to contend against the strength of the wind. At this time they take refuge in huts and houses, or any building that will afford them shelter. The first bird of this kind that I saw had taken refuge in the General Hospital at Madras; and subsequently, at Nellore, I obtained many alive under the same circumstances. Layard states that in Ceylon it is migratory, coming in with the Snipe, in the beginning of the cold weather. He further remarks that it is shy and wary, resorting to tangled brakes and ill-kept native gardens. It seldom alights on trees, and is generally found single; but I have seen three or four together; and it feeds chiefly on the ground, on various coleopterous insects. Like others of its family, it progresses by hopping, and is in general a most silent bird, but is said to emit at times a fine loud whistling note. Its Singalese name is said to be derived from its call,—*Aoitch-i-a*, pronounced slowly and distinctly. Blyth was informed that it uttered a loud screeching note."

There is no apparent difference in the colouring of the sexes; but specimens frequently occur among the skins sent to England with dark elongated marks down the stem of the feathers of the back and rump, while in others these parts are uniform in colour; whether these marks are characteristic of any particular season, or whether they are indicative of immaturity, I have been unable to determine, and it is a point to which I would direct the attention of those favourably situated for observation. Other differences also occasionally present themselves—the superciliary stripe being in some instances brownish buff, while in others it is of a lighter hue and, moreover, marked with green.

Although Mr. Blyth states that he has not seen this bird from any locality to the eastward of the Bay of Bengal, I possess a bird from Assam which is so closely similar to Indian examples that I question the propriety of giving it a name; it is, however, a smaller bird, and more delicately formed in every respect.

A line down the centre of the head from the bill to the nape black, narrow from the forehead to the

crown, thence to the nape wide; on each side of this a broad conspicuous stripe of buffy olive-brown, bounded below by a narrow line of dull white stained with bluish green, and terminating in a few lengthened feathers; a narrow black line under the eye, continued in a broader one down the sides of the neck, unites with the black at the nape; upper surface and greater wing-coverts dark grass-green; lesser wing-coverts glossy verditer-blue; rump and upper tail-coverts the same; primaries black, with pale bluish-grey tips, and with a large patch of white about the middle of their length, forming a conspicuous oval mark when the wing is spread; the secondaries are also black, conspicuously tipped with white, and the external ones margined with green; on the apical portion of the black, in those nearer the body, the green gradually increases in breadth till the black is nearly invisible; under surface of the wing black, interrupted by the oval spot of white and by the central under-coverts being also white, faintly tinged with blue; tail black, tipped with blue; chin and sides of the neck creamy white; breast and under surface light cinnamon brown, brightest on the breast; vent and under tail-coverts bright scarlet; bill black, with a fleshy brown base; irides hazel; legs and feet pinkish flesh-colour.

The Plate represents an adult male and a bird with the striated plumage mentioned above, both of the natural size.

PITTA OREAS, *Swinh.*

J.Oswald & H.C.Richter 3d. a. lith. Walter Imp

# PITTA OREAS, *Swinh.*

## Formosan Pitta.

*Pitta oreas*, Swinh. in Ibis, 1864, p. 428.—Elliot, Ibis, 1870, pp. 408, 415, pl. xiii. fig. 1.—G. R. Gray, Hand-list of Birds, vol. i. p. 295.

---

Two specimens of this bird were obtained by Mr. Swinhoe, one in the Island of Formosa, the other from the mountains near Taiwanfoo.

At first sight it might be considered by many persons the same as the *Pitta bengalensis* of India; but from that bird it is at once distinguished by the total absence of the white patch on the under wing-coverts, a feature which is very conspicuous in the Bengal bird when the wing is raised. Other minor differences are spoken of by Mr. Swinhoe and Mr. Elliot; but as they will be found in my extracts from the writings of those gentlemen, I need not repeat them here.

It will be seen that Mr. Swinhoe speaks of one of his specimens being adorned on the upper surface with arrowhead-shaped markings of black—a feature precisely similar to the striæ mentioned in my account of *P. bengalensis*, and which may probably be, as Mr. Swinhoe suspects, a characteristic of the nuptial plumage.

"The example described in 'The Ibis' for 1864," says Mr. Swinhoe in some notes with which he has furnished me, "was brought to me from the mountains of Tamsuy, in the north-western part of the Island of Formosa, and was sprinkled over the back and wing-coverts with arrowhead-shaped markings of black. The only other example I procured was from the mountains near Taiwanfoo: it had no spots on its upper surface; but in other respects they were alike. Both were brought to me in skin, and therefore I could not ascertain their sex. The first was shot in May; and it strikes me that the spots with which it was decorated indicate the nuptial plumage. Having never seen this Pitta in its haunts, I can give no account of its habits.

"It is allied to *Pitta cyanoptera* and *P. nympha*. From the former it can at once be distinguished by its reddish crown and light underparts, and from the latter by the colour of its crown and the want of the black chin."

"This bird," remarks Mr. Elliot, "belongs to that group which is distinguished from the other divisions of the family by having the underparts buff. It is most nearly allied to *Brachyurus coronatus*" (*Pitta bengalensis*), "but can readily be distinguished by the crown being of a dull reddish-brown, and by having the under wing-coverts jet-black without any trace of the white feathers which form so conspicuous a mark in its near ally."

The accompanying representations of this species were drawn from Mr. Swinhoe's skins, for the loan of which, as well as for many other similar favours, I here record my obligations to him. Science has indeed been greatly enriched by the exertions of this gentleman, and I am certain that every naturalist will readily join me in bearing testimony to the great value of his many and varied contributions to several departments of zoology.

The following is Mr. Swinhoe's original description of this species:—

"Crown dull reddish brown; eye-streak ochre-yellow; median coronal streak and stripes from the base of the bill, under the ear-coverts, to the back of the neck, and the entire hinder part of the neck, black; back and scapularies green; shoulder-spot and upper tail-coverts fine verditer blue; wing-coverts and tertiary quills green, more or less tinged with blue, and more or less black on their inner webs; primaries and tail black, the former with a white spot occupying portions of the first seven, the tenth slightly edged at the tip with bluish; the rest, towards the tertiaries, broadly edged for a good part of their outer web with bluish green; throat and neck white, with a tinge of ochre; under surface pale ochreous, washed with green on the flanks; centre of the belly from the breast downwards, and the whole of the under tail-coverts, fine carmine; axillaries black; underside of the shoulder-edge greenish blue; bill black; legs and claws light flesh-colour."

The figures are of the natural size.

PITTA ELLIOTI, *Oust.*

J.Gould & W.Hart del. et lith.

Walter Imp.

# PITTA ELLIOTI, *Oustalet.*

## Elliot's Pitta.

*Pitta ellioti*, Oustalet, Nouvelles Archives du Muséum, vol. x. Bulletin, p. 101, pl. ii. (1874).

---

The present species is represented by specimens of both sexes in the Paris Museum; and no other collection can at present boast of the possession of this beautiful and unique bird. Its home appears to be the interior of Cochin China, a country concerning the ornithology of which scarcely any thing has yet been written, but one which, if we may judge from the little we do know, would yield a rich increase to our knowledge of Asiatic zoology. Situated as it is, there can be no doubt that Cochin China must receive a considerable influx of the winter migrants from China, while its indigenous avifauna, if we may make a deduction from the few species recorded, must consist of a mixture of Indian, Chinese, and even Malayan forms. With regard to the latter we may remark that the present species alone is sufficient to establish a Malayan element as existing in Cochin China; for Elliot's Pitta is not allied to any of the known Chinese members of the genus, but belongs to that section, with longish tails, and a generally blue coloration, for which the term *Eucichla* has been proposed as a distinct generic title.

As might be expected in the case of a bird so recently described, nothing is known of its habits; and I therefore content myself with translating the description given by Dr. Oustalet.

"Feathers of the head, which are elongated behind so as to form a sort of crest, emerald-blue, more glistening on the forehead and eyebrow than on the crown. A black band, starting from the nostrils, passes on each side below the eye, and ends abruptly near the nape. The back is ultramarine blue, shaded with green and with brownish, the feathers of this part of the body being brown at the base, blue in the middle, and edged with green, the upper tail-coverts presenting the same tints. The quills are rather dark purplish brown; and the secondaries have their outer webs of an ashy brownish colour. The tail-feathers are intense ultramarine blue, at least on the external webs, the inner webs being more or less shaded with green. The throat is very clear blue passing into whitish, the breast of an ashy-green colour. A band of very dark bluish from the lower breast ends between the legs; the flanks and region of the vent are ornamented with black transverse bands, rather numerous, which are clearly defined on a yellow ground; the under tail-coverts are black at the base, and pass into green or ultramarine blue at their tips. The beak is dark reddish-brown; and the tarsus and toes are rather reddish, but are doubtless of a darker colour in the living bird." I have not seen a specimen of this species myself, but am indebted to Professor Milne-Edwards for a painting of the birds taken from the specimens at the Museum in the Jardin des Plantes. The painting was executed by the well-known artist M. Huet, to whom also my thanks are due. The figures in the Plate represent the male and female, of the size of life, and are founded upon the above-mentioned pictures of M. Huet.

Mr. Elliot, the monographist of this beautiful group, has taken considerable interest and trouble in the matter of my work, for which I thank him, and not only for this but for many other favours.

PITTA GRANATINA.

Wenald & W Hart del et lith

Walker Imp

# PITTA GRANATINA, *Temm.*

## Bornean Pitta.

*Pitta granatina*, Temm. Pl. Col. 506.—Lesson, Traité d'Orn. p. 395.—Müll. & Schl. Verh. Nat. Gesch. Zool. *Pitta*, pp. 10, 15, 20.—Gray, Gen. of Birds, i. p. 213.—Blyth, Journ. Asiatic Soc. Beng. xvi. p. 326.—Id. Cat. Birds Mus. Asiatic Soc. Beng. p.157.—Schlegel, Mus. Pays-Bas, *Pitta*, p. 5.—Id. Vog. Nederl. Indië, pp. 20, 35, pl. 5. fig. 3.—Wallace, Ibis, 1864, p. 107.—Salvad. Ucc. Born. p. 242.—Schlegel, Mus. Pays-Bas, Revue *Pitta*, p. 9.

*Brachyurus granatinus*, Bonap. Consp. Av. i. p. 255.—Elliot, Monogr. Pittidæ, pl. xv.

*Erythropsitta granatina*, Bonap. Consp. Volucr. Anis. p. 7 (pt.).—Walden, Ibis, 1872, p. 374.

*Phœnicocichla granatina*, Cab. & Heine, Mus. Hein. ii. p. 5 (pt.).

*Pitta (Phœnicocichla) granatina*, Gray, Hand-list of Birds, i. p. 296 (pt.).

*Brachyurus (Phœnicocichla) granatinus*, Elliot, Ibis, 1870, p. 417, fig. 3 (pt.).

---

This beautiful Pitta was first described by Temminck from specimens procured by Diard near Pontianak, in Borneo. Since the time when its discovery took place, the species has been sent by other travellers in that great island; but it has never been seen in any quantity, and cannot be called a common bird. Several writers have united the Malayan species, *Pitta coccinea* of Eyton, with the true *Pitta granatina* of Borneo; but, as I have remarked in my account of the former species, this is, in my opinion, an erroneous identification.

Indeed I am not sure that a second species has not been confounded under the single heading of *P. granatina* in the island of Borneo itself; and I invite attention to the differences which will be observed at a glance in the two figures drawn on the accompanying Plate. One of these birds is a little smaller than the other, and has the red nape-patch much finer, while there is a good deal of difference in the colour of the dorsal plumage. One bird has the feathers of the back rounded and deep purple, while in the other the feathers are pointed and beautifully glossed with purplish lilac, which is quite metallic in its brilliancy. I am not sure whether these two different states of plumage represent a distinction of sex; but if my surmise should prove correct that there are two species in Borneo, hitherto confounded under the same name, I would propose for the lilac-backed bird the appellation of *Pitta adoranda*, reserving that of *granatina* for the species with the dark purplish back, as I have in my collection an example in this state received direct from Temminck when he was Director of the Leiden Museum.

The present species appears to be confined to the island of Borneo, at different points of which it has been met with by collectors. Diard first collected it at Pontianak, Schwaner at Banjermassing, Everett at Marup, and David and Beccari at Sarawak, while I have been lately informed by Mr. Sharpe that it occurred in Mr. W. B. Pryer's consignment from Sandakan in North-east Borneo. Like most of the Pittas it would appear to be migratory; for the Marquis Doria writes that the species does not seem to be resident in the vicinity of Sarawak, as no specimens were seen during June and November. The stomachs of the specimens killed by him contained remains of small Cockroaches and Coleoptera; the iris is brown.

In the Plate are figured two specimens, one being referable to *Pitta granatina*, the other being the bird I propose to call *P. adoranda*, if it should prove to be distinct. They are both in my own collection.

PITTA COCCINEA, *Eyton.*

J. Gould & W. Hart, del. et lith. Walter. Imp.

# PITTA COCCINEA, *Eyton.*

## Malaccan Pitta.

*Pitta coccinea*, Eyton, Proceedings of the Zoological Society, 1839, p. 104.—Blyth, Journ. Asiatic Soc. Beng. xii. p. 961.

*Pitta granatina*, Moore (nec Temm.), Proceedings Zool. Soc. 1854, p. 274.—Horsf. & Moore, Cat. Birds Mus. East-India Co. i. p. 184.

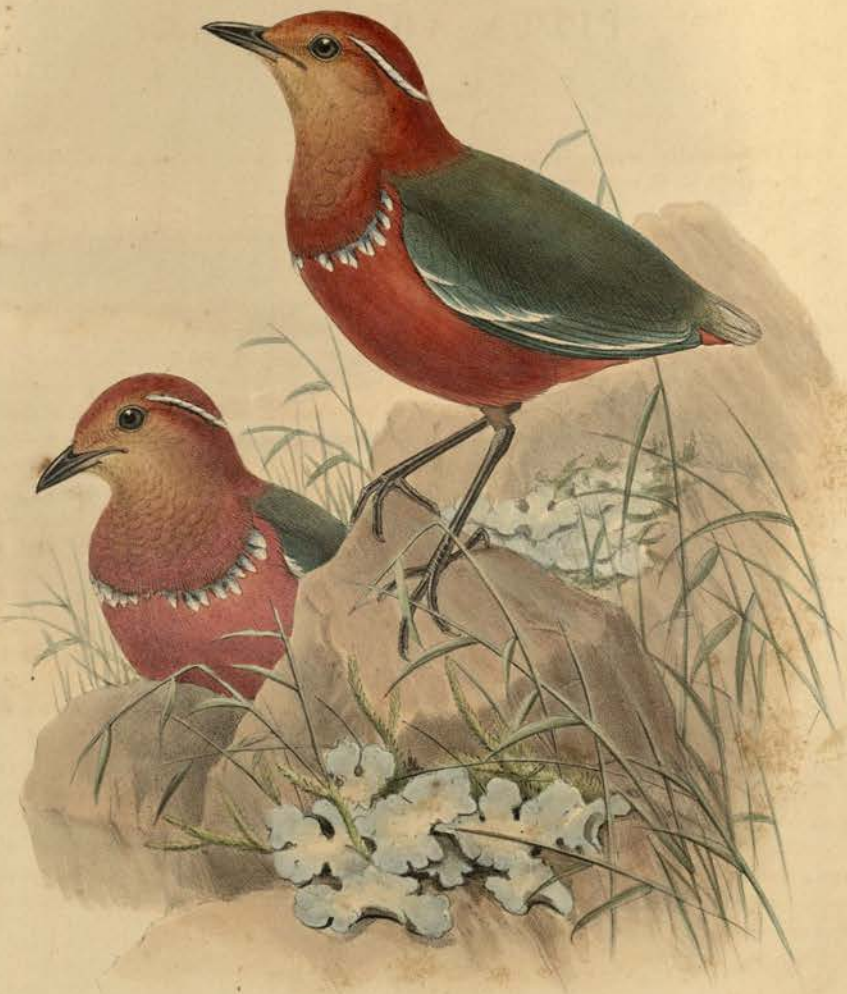
*Erythropitta coccinea*, Walden, Ibis, 1872, p. 374.

---

I CANNOT understand the hesitation with which certain ornithologists have regarded the specific differences between the present bird and the nearly allied *Pitta granatina* of Borneo. Although the characters which separate these birds may be considered slight, they are perfectly constant, and there seems to be no transition between the Malaccan species, with its narrow black forehead, and the Bornean bird, which has a black forehead of nearly double the width. The late Marquis of Tweeddale, the greatness of whose loss to ornithology is scarcely yet perfectly estimated, expressed a strong opinion upon the question of these species as far back as the year 1872. He wrote:—"I concur with Mr. Gould in regarding the Bornean bird as specifically distinct from that of Malacca (*E. coccinea*, Eyton). The following points of difference appear to be constant in *Erythropitta granatina*:—The black on the forehead recedes more from the base of the bill, and occupies more space, thus diminishing the extent of crimson. The shade of crimson is darker, being deep cherry-red, and not vermilion. The blue stripes on the sides of the head and the blue wing-coverts are distinctly paler; on the other hand, the back is very much darker, and glossed with a totally different shade of purple. The red of the abdominal region and under tail-coverts is conspicuously deeper." I may mention also that Count Salvadori likewise concurs in the advisability of separating these two species of *Pitta*. Mr. Elliot in his review of the Pittidæ, published in 'The Ibis' for 1870, still adheres to his formerly expressed opinion that these two species should be united, though he does not fail to notice the difference in the breadth of the frontal band. In the woodcuts which he has given, however, the figures are transposed, and figure 4, which represents *P. coccinea*, is mis-named fig. 3 in the letterpress of his paper.

According to Mr. Eyton the present species is called by the Malays "Mortua plando," while Dr. Cantor gives the Malayan name as "Allo-allo." Nothing has yet been published on its habits. The figures in the Plate, which represent the species of the natural size, have been drawn from examples in my own possession.

It would appear that, as in the Bornean species, the colouring of the sexes is the same.



PITTA ARQUATA, *Gould.*

J.Gould & H.C.Richter del. et lith.

Walter Imp.

# PITTA ARQUATA, *Gould.*

## Necklaced Pitta.

*Pitta (Phœnicocichla) arquata*, Gould in Ann. & Mag. Nat. Hist., 4th ser. vol. vii. p. 340.—Gray, Hand-list of Birds, pt. iii. p. 344. sp. 4370[a].

---

The beautiful group of birds of which the present is an example comprises numerous species which are widely spread over the warmer portions of the Old World, particularly India, China, Malasia, Borneo, Java, Sumatra, the smaller islands of the Indian Archipelago, New Guinea, and Australia, while a solitary one inhabits Africa. All the members of this limited family are gaily attired, the richness of their hues forming a great contrast to the inelegance of their appearance and the unsymmetrical character of their contour. Nearly every group of highly coloured birds resorts to the outermost parts of the forest or the sunny glades of the interior, where they may be seen and admired; the Pittas, on the contrary, being shy, solitary, and recluse in their habits, frequent the most rugged and stony portions of the scrub, and must be sought for to be found, generally among moss, covered stones, and tangled herbage. As already remarked, some of the species tenant continents, others large islands, and others, again, smaller islands, some of which have their own peculiar species not found elsewhere.

This new bird is somewhat allied to the *Pitta granatina* of Temminck and the *P. concinna* of Eyton. If there be any difference in size, it is perhaps a trifle smaller than either of those species; but is at once distinguished from both by its very remarkable colouring, which in some respects resembles that of the *P. erythrogastra* of Temminck.

The specimen figured is supposed with some probability to be a female; if so, the male, when discovered, will prove to be a still more lovely bird. The fine specimen from which the accompanying figures were taken was received from Borneo by Mr. Cutter, from whom I purchased it, and is now in my own collection.

Forehead, lores, and throat reddish buff; crown, nape, and breast rich rusty red; over, but posterior to the eye a lovely stripe of blue, as in *Pitta granatina*; a broken tooth-like bar of the same hue across the breast, separating the rich rusty red of the chest from the deep scarlet of the abdomen; upper surface of the body and scapularies brownish olive-green; primaries and secondaries brown, tinged with green; the secondaries are also tipped with splendid blue, but not so conspicuously as in *P. granatina*; tail blue, tinged with olive; legs and bill black.

The figures are of the size of life.

PITTA MEGARHYNCHA, *Schleg.*

J.Gould & H.C.Richter, del. et lith.

Walter, Imp.

# PITTA MEGARHYNCHA, *Schleg.*

## Large-billed Pitta.

*Pitta megarhyncha*, Schleg. Vög. Nederl. Ind., pl. 4. fig. 2.—Elliot in Ibis, 1870, pp. 408, 409, 414.
*Brachyurus megarhynchus*, Elliot in Ibis, 1870, pl. xii.

---

On reference to the opposite plate, where the present bird is represented of life-size, it will be readily seen that it offers a close alliance to *Pitta cyanoptera* and *P. nympha* (that is if the latter be really a species), and more distantly to *P. oreas* and *P. bengalensis*.

The special use of the very large bill with which this bird is furnished has not been ascertained; in all probability it is intended for the breakage of the shells of the mollusks peculiar to the little island whereon the bird is found. Its ochraceous crown, black and well-defined nuchal band, fulvous-white throat, and great black bill have been given as the specific characters of the species; in other particulars (*i. e.* its green back, shining blue shoulders, and upper tail-coverts, the white markings of the first four or five primaries, the buff colouring of the abdomen, and the scarlet under tail-coverts) it resembles *P. cyanoptera*.

Of this well-marked species a single but fine example graces the Museum of Leyden; this unique specimen was kindly transmitted to London for the use of Mr. Elliot in his résumé of the *Pittidæ*, published in 'The Ibis' for 1870. I also was allowed to make a drawing of it for the present work; and I would here record my obligations to Professor Schlegel, the worthy director of the 'Musée de Pays-Bas,' and to Mr. Elliot for the assistance they have thus rendered me.

The following brief remark is all that Mr. Elliot has recorded respecting this bird, and I believe that no one else has written a sentence in any other publication:—

"This bird bears a close resemblance to *P. cyanoptera*, but possesses a bill very different, both in shape and colour, the latter being black. It also differs in having the reddish brown of the head extending to the nape, without being broken by a black bar; the lower part of the neck behind bordered with black."

The Plate represents the same bird in two positions, of the size of life.

PITTA KOCHI, *Brüggem.*

# PITTA KOCHI, *Brüggem.*

## Koch's Pitta.

*Pitta kochi*, Brüggem. Abhandl. nat. Verein. Bremen, Band v. p. 429, Taf. iii.
*Erythropitta kochi*, Tweeddale, P. Z. S. 1878, p. 430.

---

This magnificent Pitta is as yet only known to us by a single specimen in the Darmstadt Museum, whither it was sent by a collector from the island of Luzon. It is in every sense a striking bird, on account of certain peculiarities in its coloration, but more particularly on account of its large size, which exceeds that of any other species of scarlet-breasted Pitta. Like many of the Moluccan species belonging to the same section, the present bird has a broad blue band across the chest; the dark forehead and red nape also are by no means peculiar to it; but in none of its allies do I find that broad moustache which is such a prominent feature in *Pitta kochi*.

It is the second species of the genus known to inhabit Luzon; and the other one, *Pitta erythrogastra*, though belonging to the same blue-banded section of the genus *Pitta*, is a very much smaller bird, and has a bright blue collar round the hind neck. It has also reddish ear-coverts, like the nape; and most of the Moluccan species have likewise light ear-coverts; so that *Pitta kochi* is again remarkable for having the ear-coverts dark brown, like the forehead.

The few observations above given will suffice to show that the subject of my plate is a very interesting bird; and it is to be regretted that we know nothing of its habits or economy. I cannot, however, conclude this article without expressing my heartiest acknowledgments to Dr. von Koch, the Director of the Darmstadt Museum, for his kindness in allowing me to make a drawing of the species from the unique specimen in that museum.

The following is a description of the typical specimen :—

General colour above dull olive-brown, with somewhat of a ruddy tint on the sides of the neck and mantle; wing-coverts lilac-grey, the primary-coverts and quills blackish brown; the primaries externally greyish towards their ends; the secondaries and inner greater coverts olive-brown, washed with lilac-grey on the outer webs; the second, third, and fourth primaries with a large white spot on the inner web, the last-named having the white spot on the outer web as well; upper tail-coverts and tail lilac-grey, the latter darker; forehead and crown, as well as the lores, region of the eye, and ear-coverts dark brown, the latter slightly shaded with an olive tinge; nape and hind neck dull red; cheeks ashy brown, with a bluish shade under certain lights, forming a very broad moustache; throat reddish in the centre, brown on the sides, forming a malar stripe; the fore neck red with a tinge of lilac; chest lilac-grey, the sides olive-brown; remainder of under surface of body scarlet, the sides olive-brown, with which colour the centre of the abdomen is washed; under tail-coverts scarlet, the longer ones tipped and edged with lilac-blue; thighs ashy grey; under wing-coverts dull lilac-blue, some of the outer ones tipped with white; axillaries olive-brown, like the back; quills ashy brown below, relieved by the before-mentioned white spots on the primaries. Total length 7·5 inches, culmen 1·2, wing 4·7, tail 2·2, tarsus 2·1.

The figure in the Plate represents the bird of the full size of life, and is, as above stated, drawn from the type specimen.

PITTA BAUDII, *Müller & Schleg.*

*J.Gould & W.Hart del. et lith.*

*Walter imp.*

# PITTA BAUDII, *Müll. & Schl.*

## Red-backed Pitta.

*Pitta baudii*, Müller & Schl. Verh. Natuurl. Gesch. Zool. Aves, *Pitta*, pp. 10–20, pl. 2 (1839–44).—Gray, Gen. B. i. p. 243 (1846).—Low, Sarawak, p. 410 (1848).—Schl. Handl. Dierk. i. p. 253 (1857).—Id. Vog. Nederl. Ind. *Pittæ*, pl. 5. figs. 1 and 2 (1863).—Id. Mus. P. B. *Pitta*, p. 5 (1863).—Wall. Ibis, 1864, p. 107.—Gray, Handl. B. i. p. 296. no. 4374.—Salvad. Ucc. Born. p. 234. no. 254.

*Brachyurus baudi*, Bp. Consp. i. p. 255 (1850).—Elliot, Monogr. Pitt. pl. xxii. (1863).—Id. Ibis, 1870, p. 419.

*Iridipitta baudii*, Bp. Consp. Volucr. Anisod. p. 7 (1854).

---

So RARE is this fine Pitta in the Museums of Europe, that the individual specimens at present known to naturalists cannot exceed a dozen in number. Besides those in the Leyden Museum, I have myself only seen two adult males—one in the collection of the British Museum, and another in my own cabinet; and it is only within the last few months that we have received authentic information respecting the exact part of Borneo where this bird is to be looked for, although it is highly probable that it is to be found sparingly distributed all over that large island. To Mr. Hugh Low, however, we owe the discovery of the adult female of this beautiful bird, as hitherto only the young plumage of this sex was known, as figured by Schlegel (*l. c.*). I have to thank Mr. Low for the loan of his female specimen for the purposes of the present work; and a faithful likeness of it will be found on the accompanying Plate. He informs me that the only specimens which he has seen his collectors obtained on the Mengalong river, opposite to the island of Labuan. It is, as far as he knows, never found on the last-named island, but is strictly confined to the mainland. I must mention that the female figured by me is rather larger in all its dimensions than the males mentioned above; and it is probable that the examples from N.W. Borneo will be found to exceed in size those from other localities.

I add a full description of both sexes of this Pitta:—

*Adult male.* Crown of head and nape brilliant cobalt blue; lores, feathers round the eye, sides of head, ear-coverts, and sides of neck black, bordering the blue crown for the entire extent, the lower feathers at the side of the neck purple, tipped with red where they adjoin the mantle; back and scapulars red, somewhat washed with sandy brown on the scapulars, rump, and upper tail-coverts; the lower upper tail-coverts bright cobalt, with a mesial streak of black; tail deep blue, black below; wing-coverts black, the median series tipped with white, forming a diagonal bar across the wing; quills blackish brown, the innermost secondaries externally sandy brown, the outermost of the latter tipped with white, forming a second bar across the wing; cheeks, throat, and sides of neck white; fore neck and breast black, the rest of the under surface purplish blue, shaded with richer purple on the sides of the body; thighs ashy white; under wing-coverts black, the axillaries tipped with white; lower surface of quills blackish brown; bill black; feet pale yellowish.

Total length 6·5 inches; culmen 0·85, wings 3·4, tail 1·75, tarsus 1·4.

*Adult female.* Above red, the head dull ochraceous brown; sides of face and under surface of body ochraceous brown, paler and inclining to buff on the abdomen, the sides of the neck washed with the same red as the back; under tail-coverts blue, slightly washed with ochre on the margins; wing-coverts as in the male, but browner and having the white bar across the wing slightly tinged with ochre; quills blackish, the inner secondaries dull sandy brown, the outer secondaries ochraceous towards the tips; upper tail-coverts bright cobalt; tail deep blue.

Total length 6 inches; culmen 0·9, wing 3·55, tail 1·6, tarsus 1·5.

The figures in the Plate represent two adult males and a female, of the natural size. One of them, a fine male, is in my own possession, and was received in exchange direct from M. Temminck. The female, collected by Mr. Hugh Low, is now in the collection of the British Museum.

I cannot conclude this article without making a remark on my friend Mr. Elliot's plate in his 'Monograph of the Pittidæ.' The specimens there figured are represented with a conspicuous white band across the lower rump, of which there is no trace in the bird itself; the white band on the wing is also represented as quite different from what it really is in the specimens examined by me. The specimen from which Mr. Elliot's figures are drawn is said to be in the Philadelphia Academy collection; and an examination appears to be desirable.

PITTA GURNEYI, *Hume.*

J. Gould. & W. Hart. del. et lith.

Walter imp.

# PITTA GURNEYI, *Hume.*

## Gurney's Pitta.

*Pitta gurneyi*, Hume, Stray Feathers, vol. iii. no. 4, p. 296.
*Brachyurus gurneyi*, Id. tom. cit. no. 6, pl. 3.

---

We are indebted to the pages of 'Stray Feathers' for a knowledge of this new and magnificent Pitta; and I can readily conceive with what real pleasure Mr. Allan Hume took up his pen to write a description of so interesting a bird.

To myself, who have from the beginning of my career as an ornithologist been much attached to this family, the discovery was especially welcome; but how much was this feeling enhanced by Mr. Hume presenting me with a fine pair (male and female adult) for my already, I may say, unique collection of this beautiful family!

Not only is this bird entirely new, but it is an additional and fourth species of a small section of the Pittidæ whose coloration is most attractive and interesting. Mr. Hume having given a most careful description of both sexes of the *Pitta gurneyi*, and his reason for dedicating this new bird to his friend Mr. J. H. Gurney, I shall take the liberty to copy nearly verbatim what he has so well said:—"I dedicate this really lovely species, an inhabitant of the most southern portions of the Tenasserim Provinces, to my kind friend Mr. J. H. Gurney, well known to all ornithologists as the first living authority where Raptorial birds are concerned.

"No more beautiful or interesting addition to our Indian avifauna has been made for many a long day; and its discovery is one of the results of the systematic ornithological survey of the Tenasserim Provinces which for the past two years has been vigorously prosecuted by my curator Mr. William Davison and my whole staff.

"Though conspicuously different from any one of them, this new species is most nearly allied to *P. cyanura*, Gmel. (*guaiana*, P. L. S. Müll.), *P. schwaneri*, Temm., and *P. boschi*, S. Müll. (? *elegans*, Lesson).

"There is the same cuneiform blue tail, the same comparatively small bill, the same more or less rufous olivaceous upper surface, the same difference in the sexes, an orange-brown replacing on the head of the female the more marked colours of that portion of the male.

"While dealing with a species of this genus I take the opportunity of noting that in a recent livraison of the Museum des Pays-Bas (dated April 1874) Professor Schlegel remarks of this genus, 'Ces oiseaux aux habitudes parfaitement sédentaires et ne sachant guère voler, n'ont pas la faculté de se transporter dans d'autres localités du lieu qui les a vu naître.'

"Now, as regards those species which I have had most opportunities of observing, viz. *moluccensis* and *coronata*, these remarks are wholly erroneous. Both species are eminently migratory; neither, at any rate within our limits, are ever found at other seasons of the year anywhere in or near the localities in which they breed. Both yearly travel hundreds of miles to their breeding-haunts, streaming up in tens of thousands of pairs, all moving at about the same time, though not in flocks. As to *coronata*, Layard and Jerdon and others have recorded this years ago. As to *cyanoptera*, we have found this the case during the past two years in Burmah: they come up from the Malay peninsula, and flood not only the Tenasserim Provinces, but the valley of the Irrawady, some at any rate getting as high as Thayetmyo; and in this migration they are accompanied by the nearly allied but much larger-billed *megarhynchus*. Doria, too, I see, as quoted by Salvadori ('Uccelli di Borneo,' p. 236), notices that in Borneo also they are migratory, no specimen having been obtained at Sarawak before October (though not rare there in that month), November, and December."

The Plate represents two males and a female, of the size of life.

Vol. 5

PITTA STEEREI.

J. Gould & W. Hart, del. et lith.

Walter imp.

# PITTA STEERII.

## Steere's Pitta.

*Brachyurus steerii*, Sharpe, Nature, August 3, 1876.

---

Of all the fine birds brought to light by Dr. Steere's Expedition to the Philippine Islands, this is decidedly one of the most striking (his grandest novelty being, of course, the *Sarcophanops steerii*). Not only is this new Pitta one of the largest of the family, falling not far short of the well-known *Pitta maxima* in size, but it is also perfectly distinct as regards its coloration; for there is no species which is blue underneath as the present bird is. From its black head, it ought to be associated with the group called by Bonaparte *Melanopitta*; but from all these it is easily distinguished by its unique coloration.

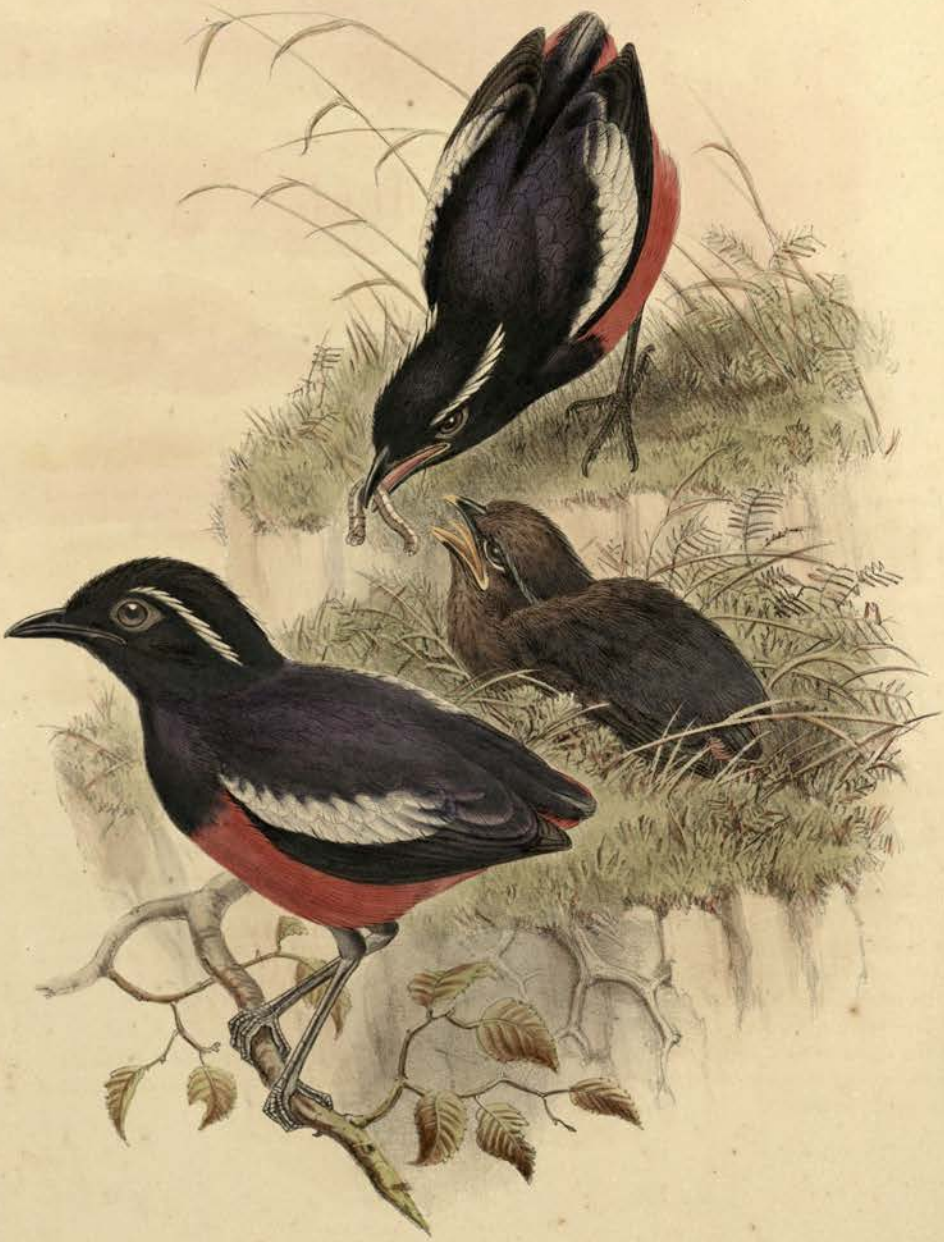
Dr. Steere discovered this Pitta in the Province of Zamboanga in the large island of Mindanao. He stayed for some time hunting in the neighbourhood of Zamboanga and Dumalon; and he procured several new species of birds during his residence in that island. It was in the forests adjoining the above-mentioned places that he met with this beautiful Pitta.

The following is a description of the typical specimens:—

Above dull green, with a shade of brighter grass-green under certain lights; wing-coverts silvery cobalt, forming a large shoulder-patch; bastard wing, primary-coverts, and greater coverts black, the latter blue at the ends, the innermost more or less green on the inner webs; primaries black, greenish towards the ends of the outer webs of the shorter ones, the secondaries more and more green on the outer webs as they approach the innermost, which are entirely green, the third to the seventh primaries having a large white spot forming an alar speculum; upper tail-coverts silvery cobalt, forming a band across the lower rump, some of the upper tail-coverts black; tail black; crown of head, nape, and sides of face black; cheeks and throat white, rest of under surface of body light blue, the centre of the abdomen black; under wing-coverts black.

Another specimen, apparently a somewhat younger bird, was also procured by Dr. Steere, and had the lower part of the belly pale vermilion.

I am under the greatest obligation to Dr. Steere for his kindness in lending me so many of his rare birds. The figures in the Plate represent the only two specimens of this Pitta procured by him, and are of the size of life.



PITTA USSHERI.

J. Gould. & W. Hart del. et lith.

Walter imp.

# PITTA USSHERI.

## Ussher's Pitta.

*Brachyurus ussheri*, Sharpe, Proc. Zool. Soc. February 6, 1877.

---

It is satisfactory to naturalists to find that Governor Ussher, whose zeal in the cause of science led to the discovery of so many rare and interesting birds during his residence on the west coast of Africa, has become Governor of the island of Labuan, where fresh zoological fields for his energy await him. Nor has he been long in reminding us of the fact; for soon after his arrival he dispatched the trained collector bequeathed to him by Mr. Hugh Low to the mainland of Borneo to search for Bulwer's Pheasant. At present this collector, the identical man who obtained the original specimen of that splendid Pheasant, has not succeeded in getting any more; but amongst the birds which he brought back from the Lawas river are a second species of *Lobiophasis* and the Pitta which forms the subject of the accompanying plate.

Mr. Bowdler Sharpe, to whom the specimens were consigned by his friend Mr. Ussher, has named the species after the latter gentleman; and it gives me great pleasure to add my appreciation of the important results contributed by His Excellency to our knowledge of birds.

Ussher's Pitta finds its nearest ally in the *Pitta venusta* of Java; but it is distinguished at once from that species by its black colour, washed with purple above, as well as by the throat and chest being of this same purplish black. The enamel-like blue markings on the wing are also very much larger and brighter.

The following is a careful description of the typical example:—

General colour above black with a distinct shade of purple everywhere, excepting on the head, which is glossy black, as well as the lores and sides of the face; from above the eye to the nape runs a distinct superciliary streak of pointed feathers, silvery cobalt in colour, slightly shaded with purple on the hinder plumes; wings blue-black, the median and greater coverts bright cobalt at the tips and on the outer webs, forming an enamel-like patch on the wing; quills black, the inner secondaries externally deep blue; tail deep blue; throat and chest black, the latter strongly washed with purple, shading into the crimson of the breast; rest of the under surface of the body deep crimson; thighs brown; under wing-coverts black.

Total length 6·8 inches; culmen 0·85, wing 3·45, tail 1·3, tarsus 1·6.

The figures in the Plate represent the old bird in two positions, as well as a nestling which I discovered in my own collection, and which doubtless belongs to this species. The figures of the adult are drawn from the typical specimen.

PITTA ATRICAPILLA, *Cuv.*

J. Gould and H. C. Richter, del. et lith.

Hullmandel & Walton, Imp.

# PITTA ATRICAPILLA, *Cuv.*

## Black-headed Pitta.

*Pitta atricapilla*, Cuv.—Müll. Verh. Nat. Gesch. Nederl. Ind., p. 19.
—— *Philippensis*, Vieill.
—— *melanocephala*, Wagl.
—— *brevicauda*, Bodd.—Gray.—Gray and Mitch. Gen. of Birds, vol. i. p. 214, *Pitta*, sp. 28.
*Corvus brachyurus philippensis*, Gmel.
*Brachyurus atricapilla*, Bonap. Consp. Gen. Av., p. 256, *Brachyurus*, sp. 25.—Buff. Pl. Enl., 89.
—— *Mülleri*, Bonap. Consp, Gen. Av., p. 256, *Brachyurus* sp. 23?

---

The Indian Islands would seem to be the great stronghold of the members of the beautiful *Pittæ*, for although some of the species are found on the continent of India, by far the greater number of them inhabit the islands running southward from thence to Australia. It will be seen that I have considered the *Pitta Mülleri* as identical with the present bird; if I am wrong in so doing, an opportunity will doubtless occur for my correcting the error. I have now before me several specimens from very distant localities, all so intimately allied, as to leave no doubt in my mind of their being one and the same species. From the collection of T. C. Eyton, Esq., I have a fine adult from China; in the British Museum there are both old and young birds from the Philippine Islands; while in my own collection there is a specimen from Borneo, the latter differing only in being a trifle larger in size than those from more northern localities, the colouring and every mark being precisely the same. If the *Pitta Mülleri* be distinct, it is a bird I have not seen, or my recollection has failed me since I examined the fine series of this group of birds in the splendid Museum at Leyden.

Although the brilliant plumage is acquired almost as soon as the bird has left the nest, considerable difference occurs both in the intensity of the black which covers the head and the extent of the white on the primaries, which is much less than in the adults; moreover, in the youthful state the first and second primaries are in some instances entirely black; and large blotches of white occur on the secondaries, of which there is no trace whatever when the bird has attained its complete livery. A difference is not to be looked for in the colouring of the sexes, for they are alike in this respect, a somewhat smaller size only indicating the female. Dense woods of bamboos, forests bordering hills, and dry stony gullies shrouded from the light, are the favourite resort of this bird, in which respect its habits assimilate to those of its prototypes in Australia, the *Pitta Iris* and *P. strepitans*.

Head and neck deep black; back, scapularies and tertiaries dark grass-green; lesser wing-coverts shining verditer blue; greater coverts light grass-green; primaries white, tipped with brownish black; spurious wing and base of the secondaries deep black; rump and upper tail-coverts shining verditer blue; tail deep black, slightly tipped with green; under surface of the shoulder black; breast, abdomen and flanks green; centre of the abdomen and under tail-coverts blood-red; bill black; feet fleshy brown.

The front figure is of the natural size; the hinder one somewhat reduced.

PITTA CYANURA.

J. Gould and H.C. Richter del. et lith.

Walter & Cohn, Imp.

# PITTA CYANURA.

## Blue-tailed Pitta.

*Turdus cyanurus*, Gmel. edit. Linn. Syst. Nat., tom. i. p. 828.—Lath. Ind. Orn., vol. i. p. 361.
*Myiothera affinis*, Horsf. Trans. Linn. Soc., vol. xiii. p. 154.—Lath. Gen. Hist., vol. iii. p. 66.—Less. Man. d'Orn., tom. i. p. 244.
——— *cyanura*, Cuv. Règne Anim. 1817, vol. i. p. 357.
*Pitta cyanura*, Vieill. Gal. des Ois., tom. i. p. 246, pl. 153.—Less. Traité d'Orn., p. 394.—Vig. App. Mem. Raffles, p. 659.—Gray and Mitch. Gen. of Birds, vol. i. p. 213.—Blyth, Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 159.—Horsf. and Moore, Cat. of Birds in Mus. East Ind. Comp., vol. i. p. 183.—Strickl. in Proc. Zool. Soc., part xiv. p. 100.—Bonap. Consp. Gen. Av., tom. i. p. 256, *Pitta*, sp. 1.—Id. Consp. Voluc. Anis. 1857, p. 7.—Müll. and Schleg. Verh. Nat. Gesch. Ned. Ind., p. 3.—Elliot, Mon. of Pittidæ, pl. xxix.
*Punglor*, Java, Horsfield.
*Sintar*, Sumatra, Raffles.
*Manok Paok*, Sudanese, Müll. and Schlegel.

---

Of the numerous members of the present very beautiful family of birds, the comparatively common *Pitta cyanura* must be regarded as one of the most elegant; it is also one of the few species respecting which any information has been placed on record. The following interesting account of the bird, its habits and economy, is taken from the recently published 'Monograph of the Pittidæ,' by Mr. D. G. Elliot of New York, a gentleman deserving the praise of all ornithologists for his labours in their own branch of science:—

"This species," say MM. Müller and Schlegel, "which has hitherto been but seldom met with in Java, is known to the Sudanese in the western part of the island under the name of *Manok Paok*, while, according to Dr. Horsfield, it is by the real Javanese in the eastern section of the island called *Punglor*. The first appellation is derived from its cry, which consists of a pretty loud and deep whistling—a kind of shriek, which the males utter at frequent intervals during the morning hours.

"The *Pitta cyanura* is a mountain-bird, and is but seldom met with in level wooded regions, but is most often seen on old coffee-plantations and in places closely overgrown with shrubbery and seeds, at a height of from 600 to 3000 feet above the level of the sea. It is found usually in the gloomiest spots, and generally on or near the ground.

"It runs very fast, often stopping short for a few moments after each quick forward movement, with either its head bent downward, as if gazing on the ground, or else raised so as to look all around.

"They are often met with in pairs, and frequently also singly. Whenever several birds are together, say five or six, they are invariably in such cases one family, of which the young have but lately left the nest, and for a certain period still remain with the old. When two old males meet, they often fight with each other in the same manner as the Quail and other quarrelsome birds do which are in the habit of dwelling on the ground: as with those species, the time for these battles among the *Pittæ cyanuræ* is generally shortly before their breeding-season, the appointed time for which seems to be from January to May.

"Upon one occasion we discovered near Mount Parang, in the Parang Regencies, a nest of this bird, on the 4th of February, which, like another brought to us a few weeks later, contained five eggs; a third nest with four eggs we found during the month of March, on the western slope of Mount Pangerango; and finally a fourth, with an equal number of eggs, we succeeded in obtaining at the beginning of April.

"The nest is generally built a little above the ground, hardly ever more than from 6 to 8 feet. It is most often placed in a secluded spot among the tough branches of the parasitic orchids growing on the trunk of some old tree. These closely grown plants being frequently damp and mouldy throughout, it follows that occasionally the nest becomes soaked through from beneath. It is constructed without art, but with some solidity, of dry leaves and roots, occasionally interwoven with straws and dried bits of reeds. The eggs, four or five in number, compared with those of European birds, come the nearest to those of the *Oriolus Galbula*, but are of a less oval shape, and subject to many deviations as regards colour. The reddish-brown and black points and spots, with the brighter marbled colouring frequently observed between the spots, accumulate mostly near the larger end of the egg. In some cases the colouring is so pale and indistinct that the egg has the appearance of being of a dull white; the shape also differs occasionally, some being oval, others of a more rounded form.

"On the whole, the *Pitta cyanura* is not of very shy habits, although one is sometimes met with at which it is not easy to get a shot. When chased, they fly along the ground with a strong, free, rapid flight, take refuge at various distances, and alight either near the ground on a projecting stump or upon the branch of

some trunk. Seeking their food upon the ground, they are seen sometimes, like a chicken, scratching with their feet, and greedily examining with their bill the scattered dry leaves and the uncovered spot of ground. Their food consists of earth-worms, beetles, and other insects and their larvæ."

The male has the crown of the head, lores, a broad stripe from the base of the lower mandible and the occiput deep velvety black; over each eye a broad stripe of rich gamboge-yellow; all the upper surface and tertiaries rich golden brown; wing-coverts deep black, with an oblong mark of white at the tip of the outer web of each feather; primaries and secondaries black at the base, passing into brown at the tip; two or three of the central secondaries narrowly margined on their apical portion with white; upper and under tail-coverts and tail very rich deep blue; throat white, washed with pale yellow, which gradually deepens into gamboge-yellow on the sides of the neck; below this light-coloured gorget a band of rich deep blue; remainder of the under surface crossed alternately with narrow bands of orange-yellow and deep blue, and suffused with a lilaceous bloom on the centre of the abdomen; bill black; feet flesh-colour.

The female has the head light orange-brown, striated with brownish black on the crown, the black mark on the side of the head finely striated posterior to the eye with orange; throat white, washed with light orange-brown on the sides; the line of blue bounding the gorget very narrow; the alternate bands of the under surface black and pale greyish brown, instead of blue and orange, and the lilaceous hue much paler; in all other respects the plumage resembles that of the male.

The Plate represents the two sexes, of the size of life.

PITTA SCHWANERI, *Temm.*

# PITTA SCHWANERI, *Temm.*

## Schwaner's Pitta.

*Pitta Schwaneri*, Temm. in Leyden Museum.—Bonap. Consp. Gen. Av., tom. i. p. 256.—Id. Consp. Voluc. Anisod. 1854, p. 7, no. 200.—Elliot, Mon. of Pittidæ, pl. xxx.

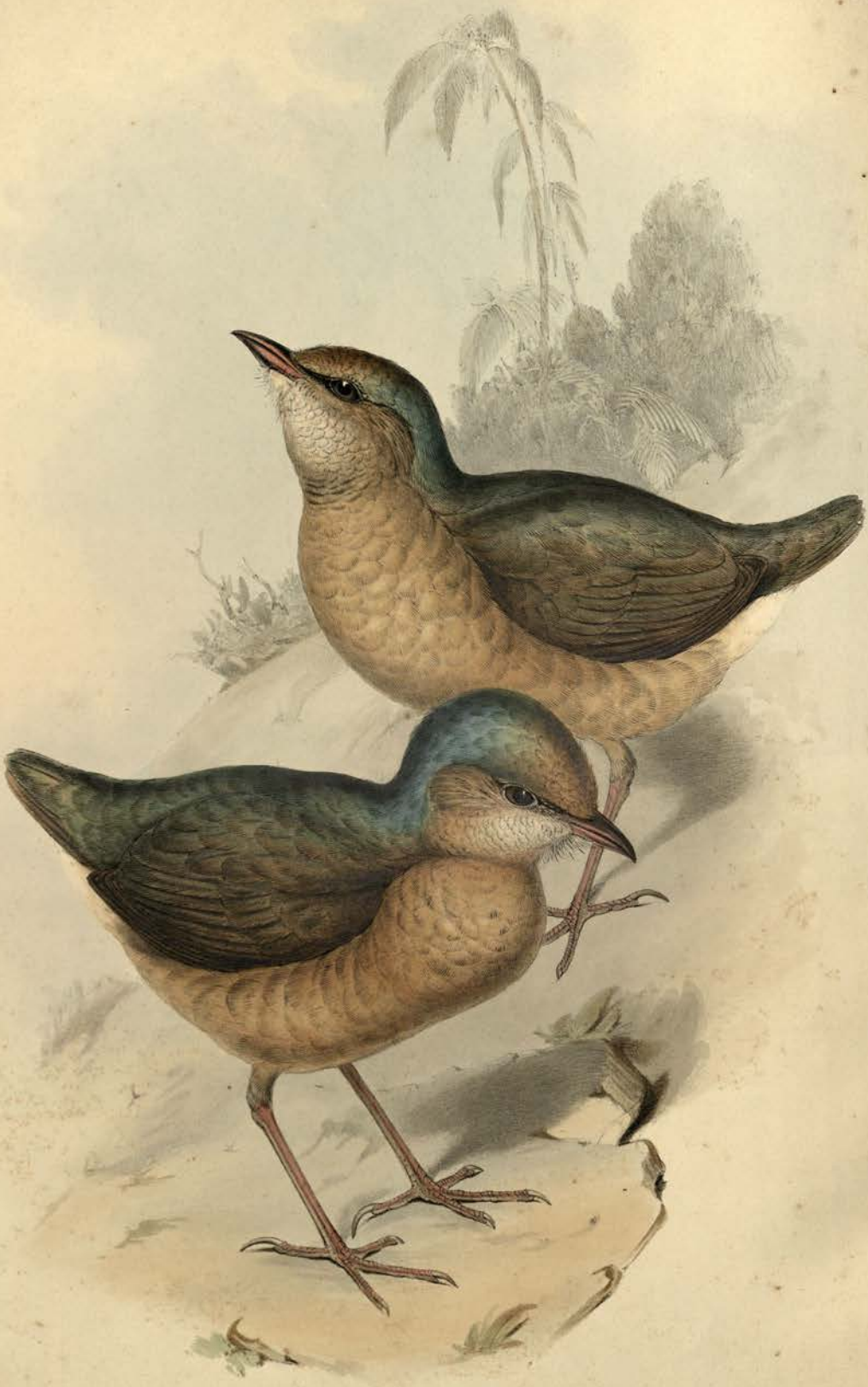
---

Of the three nearly allied species *Pitta cyanura*, *P. Boschi*, and *P. Schwaneri*, the last-mentioned bird is the rarest. In point of beauty it is just intermediate between the two others; for while it wants the fiery and blue chest-markings of *P. Boschi*, it excels the *P. cyanura* in the rich blue of the centre of its abdomen. The native country of this fine bird is the island of Borneo; and this, I regret to say, is all that is known respecting it. The accompanying Plate illustrates both sexes as accurately as may be; but to do more than approximate to the colouring of these birds is out of the question—their tints being lovely in the extreme, and their iridescent hues so surpassingly beautiful as to be inimitable in a drawing.

The male has the crown of the head, lores, a broad stripe from the base of the lower mandible, and the occiput deep black, passing into rich blue where it joins the deep cinnamon-brown of the upper surface; over each eye a broad stripe of the richest gamboge-yellow; wing-coverts black, with a large oblong mark of white at the tip of the outer web of each feather; primaries and secondaries black; two or three of the central secondaries narrowly edged with white, within which is a tinge of blue near the tip; chin white, passing into rich gamboge-yellow below, and into a still richer tint of the same colour on the sides of the neck; below the throat-gorget, the breast and flanks are alternately barred with narrow bands of deep blue and broader bands of gamboge-yellow terminating on the flanks in a conspicuous patch of fine yellow; centre of the abdomen deep blue; upper and under tail-coverts and tail rich deep blue, glossed with lighter blue on the margins of the feathers.

The female has the crown of the head, lores, and stripe through the eye dull black; stripe over the eye rich orange-yellow; throat dull white, washed with orange, which deepens on the sides of the neck; primaries brown; bands of the under surface more distinct, but of a much paler hue: in all other respects very similar to the male.

The Plate represents the two sexes, of the size of life.



PITTA NIPALENSIS: *Hodgs.*

J. Gould & H.C. Richter del. et lith.

Hullmandel & Walton imp.

# PITTA NIPALENSIS.

## Nepaul Pitta.

*Paludicola Nipalensis*, Hodgs. Journ. Asiat. Soc. Beng., vol. vi. p. 103.
*Pitta nuchalis*, Blyth, Journ. Asiat. Soc. Beng., vol. xi. p. 188.
*Helcornis (Paludicola) nipalensis*, Hodgs., Gray, Zool. Misc., p. 83.
*Hydrornis nipalensis*, Blyth.
*Pitta nipalensis*, Cat. of Spec. and Draw. of Mamm. and Birds presented by B. H. Hodgson, Esq. to Brit. Mus., p. 78.
—Blyth, Cat. of Birds in Mus. Asiat. Soc., p. 156.

---

As its name implies, this species inhabits the rich forests of Nepaul; it is also a native of Sikim and Bhotan, from all of which countries I have seen specimens; it is, however, still a rare bird in the collections of this country, all the examples that have come under my notice being in the possession of the British Museum, the East India Company, Sir William Jardine, Bart., and myself. It is more nearly allied to the *P. cærulea* than to any other member of the genus, but possesses many well-marked characters which distinguish it from that species. All the information we possess respecting it has been made known to us by Mr. Hodgson, who in a paper published by him in the "Journal of the Asiatic Society of Bengal," "On three new Genera or Subgenera of Thrushes," says, "This bird never quits the forests, and usually frequents those parts of them only which abound with thick low brushwood; it seldom perches except at night, and then only on low bushes; it feeds principally in swamps and rills, upon the hard insects proper to such situations: of berries and seeds it seldom, if ever, partakes. It flies so badly and is so stupid, that I have seen it taken by a single man."

The sexes are very similar in colour, but the female differs from the male in having the back of the neck of a pale dull green instead of a rich deep greenish blue; in some specimens a gular band of small crescentic marks of dark brown is observable, but this does not appear to be constant.

Mr. Hodgson's description, in which he speaks of the wing-coverts having large buff drops at the end of each plume, doubtless applies to the immature bird, for nothing of the kind is to be found in the adult birds that I have seen.

Forehead, ear-coverts and all the under surface deep buff, fading into buffy white on the throat and under tail-coverts; hinder part of the head and the nape rich deep greenish blue; upper surface and wing-coverts dull green shaded with rufous brown; wings and tail brown, with paler edges; in some specimens a gular band of crescentic marks of brown, produced by the basal brown of the feathers not being quite hidden by the succeeding ones; culmen and tip of the bill dark brown; base of the mandibles and the scales on the front of the tarsi and upper surface of the toes reddish flesh-colour; hinder portion of the tarsi and remainder of the toes ordinary flesh-colour; nails whitish horn-colour; irides brown.

I am indebted to Sir William Jardine, Bart. for the loan of one of the specimens figured in the accompanying Plate, which represents the male and female of the natural size.

PITTA CYANEA: *Blyth.*

J. Gould and H.C. Richter del. et lith.

Hullmandel & Walton imp.

# PITTA CYANEA, *Blyth.*

## Blue Pitta.

*Pitta gigas*, Blyth, Journ. Asiat. Soc. Beng., vol. xii. p. 961.
—— *cyanea*, Blyth, Journ. Asiat. Soc. Beng., vol. xii. p. 1008.—Ib. Cat. of Birds in Mus. Asiat. Soc. Calcutta, p. 157.—Gray and Mitch. Gen. of Birds, vol. i. p. 213, *Pitta*, sp. 4. pl. lv.
*Brachyurus cyaneus*, Blyth, Journ. Asiat. Soc. Beng., vol. xvi. p. 153.

---

Irrespective of their form, which is not very graceful, there certainly is not a more beautiful tribe of birds than the members of the genus *Pitta*, and the present species must always rank as one of the most lovely of the entire group, of which hitherto the Indian islands and the continent of Australia have been considered the native habitat; but we now know that the Indian continent is also tenanted by several of them. Mr. Blyth, who first described this bird in the "Journal of the Asiatic Society of Bengal," under the name of *P. cyanea*, states that it was received from Arracan. I am indebted to H. E. Strickland, Esq. for the loan of the fine example from which my figures are taken, and which, with two others in the Museum of the Honourable East India Company, are all that have come under my notice.

Crown of the head dull olive-brown, with a stripe of black down the centre; occiput bright red; upper surface fine blue; under surface pale blue washed with green on the breast, all the feathers marked with imperfect black bands, which become entire on the sides of the breast and flanks; lores and stripe from the eye to the nape black; throat light brown, with an oblique mark on either side of black, with a stripe of buffy white down the centre of each feather; bases of the primaries and tips of the under wing-coverts white; primaries slaty black; bill black; feet flesh-colour.

The figures are of the natural size; the plant in the background is the *Gastrochilus pulcherrimus*.

PITTA CÆRULEA.

# PITTA CÆRULEA.

## Cærulean Pitta.

*Myiothera cærulea*, Raffles, Transactions of the Linnean Society, xiii. p. 301 (1821).

*Pitta gigas*, Temminck, Pl. Col. 217 (1823).—Lesson, Traité d'Orn. p. 394 (1831).—Müll. & Schleg. Verh. Nat. Gesch. fol. Zool. Pitta, p. 14 (1839–44).

*Pitta cærulea*, Vigors, Memoir of Raffles, App. p. 659 (1830).—Gray, Gen. B. i. p. 213 (1846).—Blyth, Cat. B. Mus. A. S. B. p. 156 (1849).—Moore, P. Z. S. 1854, p. 273.—Horsfield & Moore, Cat. Birds Mus. E.-I. Co. i. p. 181 (1854).—Schlegel, Vog. Nederl. Indie, Pitta, p. 2, pl. i. figs. 1–3 (1863).—Id. Mus. Pays-Bas, Pitta, p. 1 (1863).—Wall. Ibis, 1864, p. 108.

*Brachyurus cæruleus*, Blyth, Journ. As. Soc. Beng. xvi. p. 153 (1847).—Bp. Consp. i. p. 253 (1850).—Elliot, Monogr. Pittidæ, pl. i. (1863).—Id. Ibis, 1870, p. 412.

*Gigantipitta cærulea*, Bonap. Consp. Volucr. Anisod. p. 7 (1854).

---

As far as our knowledge extends, the present species is really much the largest of this interesting group of birds, and is distinguished from most of its congeners by another *distinct* character, the decided differences in the sexes as regards colour. Whilst admitting also that it is the giant of the group, and that its distinctions are very marked, I will give the pith of what has been written respecting it. Mr. Elliot has placed it first in the plates of his 'Monograph,' and has given two illustrations of male, female, and young, and then goes on to say :—"The Pittas, although one of the most beautiful as regards richness and variety of plumage, are among the least known of the many families of birds. Inhabiting places and countries trodden in many cases only by the adventurous foot of the explorer, and being of quiet, unobtrusive habits, these beautiful denizens of the woods and plains have escaped notice (in some species until very lately), even from the eager eyes of the enthusiastic student of nature. Of the well-known species, examples are not often to be met with, and then but seldom out of the large and magnificent ornithological collections contained in different national museums.

"Former writers, when treating of this group, seem to have little or nothing to relate regarding their economy or habits, and confine themselves principally to scientific nomenclature, and even later authors have as yet thrown but little light upon them. Still no one can look upon these beautiful creatures with indifference; and although what has now been gathered may be but little, yet I shall deem myself amply repaid if any thing shall have been added to our knowledge of this interesting group.

"The present species is one of the handsomest; and it gives me much pleasure to be able (through the kindness of M. le Dr. Pucheran, who allowed the specimen to be removed from the case in the museum of the Jardin des Plantes) to give so good a representation of the Cærulean Pitta in its native haunt. Its habits are similar to those of the Thrushes, hopping about among the bushes and over the ground in search of its food, which consists principally of insects.

"Messrs. Müller and Schlegel, in the Verhand. Natuur. Geschied. (a work written in the Dutch language, the sense of which I have endeavoured to give as literally as possible), say :—'M. Temminck was the first to describe this bird in his "Planches Coloriées," and there gave the figure of a very old individual, and writes :—"In the month of June, 1834, in Sumatra, not far from the base of the mountain Singalang, in a dark, retired valley, which was entirely covered with a thick undergrowth, we saw a young male. He was sitting on the dead branch of a low tree, and was not in the least shy; the mellow reddish mouth and the peculiar softness of his feathers showed that he had not yet attained his first moult. The deep blue hue which adorns the older birds was in this specimen entirely wanting, with the exception of a slight indication on the tail. Those portions which in the adults assume the blue livery were with him of a dark yellowish brown, still darker towards the wings; and the lower parts, which are of a deep yellow colour, were with this young bird dirty yellow, towards the breast mixed with yellowish white and blackish brown. The same distribution of colours is observed among the feathers of the head and shoulders; the yellow becomes much clearer towards the sides of the head, with a rose-coloured tint near the throat. The bill, which is black in the adult, was in this one almost transparent and of the colour of horn. The black colour was entirely wanting, but the black line behind the eye was clearly observable."'"

Mr. Elliot continues—"I have been thus particular in giving the full description of the young because they are very rarely to be found in collections, and even then, in some instances, the species is doubtful. The above is also valuable as having been taken on the spot, and given by an authority none can question."

Professor Schlegel, who has given good figures of the bird in different stages of plumage, states that it is only found in the island of Sumatra, and Mr. Elliot also gives this habitat only for the species; but Mr. Moore includes it in the list of Malayan birds collected by Dr. Cantor, and we have ourselves seen specimens said to be from Malacca. That this, or a closely allied species, is found in Tenasserim is shown by Mr. Hume ('Stray Feathers,' 1875, p. 321), who has received specimens from the base of the hills dividing Siam and Tenasserim, where it was found to be not very rare by Mr. Davidson. He points out certain differences which appear to him to indicate that the bird is distinct, and he names it *Brachypus davidsoni*. Respecting this supposed species, further comparisons are necessary.

The Plate represents a male and a female the size of life.

PITTA CUCULLATA, *Hartlaub*.

J. Gould & W. Hart. del. et lith.

Walter Imp.

# PITTA CUCULLATA, *Hartl.*

## Hooded Pitta.

*Pitta cucullata*, Hartl. Rev. et Mag. de Zool. 1833, p. 65.—Gray, Gen. B. i. p. 213 (1846).—Blyth, Cat. B. Mus. A. S. B. p. 157 (1849).—Moore, P. Z. S. 1854, p. 274.—Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 399 (1856).—Cass. U.S. Expl. Exp. Birds, p. 437 (1858).—Jerd. B. Ind. i. p. 504 (1862).—Gray, Hand-l. B. p. 295 (1869).

—— *nigricollis*, Blyth, J. A. S. B. xii. p. 960 (1843).

—— *rhodogaster*, Hodgs. J. A. S. B. xii. p. 961 (1843).

—— *malaccensis*, Müll. & Schleg. Verh. Natuurl. Gesch. Zool. p. 19 (1844).

—— *coronata*, Peale, U.S. Expl. Exp. Birds, p. 891 (1848).

*Brachyurus cucullatus*, Bp. Consp. i. p. 255 (1850).—Elliot, Monogr. Pittidæ, pl. xxviii. (1863).—Hume, Str. F. 1875, p. 109.

*Melanopitta cucullata*, Bp. Consp. Volucr. Anis. p. 7 (1854).—Hume, S. F. 1874, p. 475.—Id. Nests & Eggs Ind. B. p. 225 (1875).

---

The close connexion which exists between the avifauna of the Eastern Himalayas and that of the Malayan peninsula is illustrated by the occurrence of several peculiar forms; but by none is the fact better exemplified than by the subject of the present article. Its range extends from Nepal and Sikhim, through Assam, Burmah, and Tenasserim to the Malayan peninsula; and specimens from all these localities are identical.

The following observation is extracted from Mr. Hume's 'Nests and Eggs of Indian Birds:'—

"According to Mr. Hodgson's notes and drawings, the Hooded Pitta breeds in the central regions of Nepal and about Darjeeling in April and May. They build a large globular nest, one of which measured nearly 6·75 inches externally, and had a circular opening, fully 3 inches in diameter, on one side. They place their nests, very generally on the ground, in clumps of bamboos; and they construct them of dry bamboo leaves and twigs, and stems of plants, firmly and compactly interwoven. The exterior is rough and strong; the interior lined with soft vegetable fibres. They lay four eggs, very broad oval, glossy, with a pinky white ground, pretty thickly spotted all over with reddish and brownish purple; an egg figured measures 0·96 by 0·79 inch."

Dr. Jerdon says:—"I only procured one specimen, which was killed by a Lepcha when seated on her nest on the banks of the great Rungit river, about 1200 feet above the sea. The nest was composed chiefly of roots and other fibrous matter, with a few hairs, and contained three eggs of a faint greenish white, with a few reddish and some fawn-coloured spots."

Mr. Oates has found the species in Upper Pegu; and Mr. Hume writes as follows with respect to it:—

"Pegu specimens are absolutely identical with many others that I have from Sikhim, where the bird is very common. Blyth apparently considers (Ibis, 1866, p. 74) that our Indian bird is distinct from the Malaccan one, and should stand under his name *nigricollis*; as far south as Tavoy, at any rate, all are of one and the same species. Mr. Oates correctly points out (as I have previously noticed) that, in describing this species, both Dr. Jerdon (B. of Ind. i. p. 505) and Mr. Elliot (Ibis, 1870, p. 420) omit the conspicuous black patch, which on the centre of the lower abdomen surmounts the rich vermilion of the lower ventral region."

Mr. Oates remarks:—"I met with this bird in one ravine only in the evergreen forests, where I procured several specimens. I searched many precisely similar localities, but never again met with it. Two pairs that I measured varied as follows:—

"Length 7·3 to 7·55, expanse 13·5 to 14·5, tail from vent 1·55 to 1·65, wing 4·25 to 4·5, bill from gape 1·05 to 1·08, tarsus 1·6 to 1·7.

"The bill was black; the inside of the mouth dusky fleshy; irides dark coffee-brown; eyelids pale plumbeous-fleshy; legs fleshy pink; claws pinkish horny."

Mr. Davison has also met with the species in Tenasserim, at Amherst; and two examples procured by Dr. Cantor in Malacca are recorded by Messrs. Horsfield and Moore in their 'Catalogue.'

Body green above; head light chestnut-brown, the lores, eyebrows, sides of face, sides of neck, as well as the hind part of the latter and throat, black; upper tail-coverts rich cobalt; least wing-coverts rich cobalt; primaries with a broad band of white; under surface of body green; on the upper abdomen a black patch; the lower abdomen and under tail-coverts scarlet; thighs brown.

The figures in the Plate are of the natural size, drawn from specimens in my own collection.

PITTA BOSCHII, *Müll & Schleg.*

Gould & W.Hart, del. & lith.

Walter Imp.

# PITTA BOSCHII, *Müll. et Schleg.*

## Van der Bosch's Pitta.

*Pitta Boschii*, Müll. et Schleg. Verh. Nat. Gesch. Ned. Ind., pp. 5, 16, pl. 1.—Moore, Proc. of Zool. Soc. 1854, p. 273.—Gray and Mitch. Gen. of Birds, vol. i. p. 213, *Pitta*, sp. 10.—Horsf. and Moore, Cat. of Birds in Mus. East-Ind. Comp., vol. i. p. 398.—Elliot, Mon. Pittidæ, pl. xxxi.

—— *elegans*, Less. Voy. de la Bonite, pl. 3.—Temm. Pl. Col. text.—Bonap. Consp. Gen. Av., vol. i. p. 256, *Pitta*, sp. 3.—Bonap. Consp. Vol. Anisod. 1854, p. 7. no. 201.

—— *(Eucichla) elegans*, Gray, Handl. of Birds, part i. p. 296.

---

Beautiful in coloration as are the lovely group of birds termed Pittas, the present species is certainly one of the most charming of them. Mr. Elliot, in his Monograph of the family, restricts the generic term *Pitta* to this bird and its two elegant allies (*Pitta cyanura* and *P. Schwaneri*), while Reichenbach, as long back as the year 1850, applied to the three species the subgeneric term *Eucichla*. In the present work I have retained all these old-world Ground-Thrushes under the genus *Pitta*. At some future period, when more species have become known and figured herein, I may deem it necessary to subdivide them according to my own views or those of the various ornithologists who have paid attention to the subject with a view to their classification. That the three species above mentioned form a natural section, I have for many years clearly seen. Specimens of both sexes of *Pitta Boschii* were brought from Sumatra by the late Sir Thomas Stamford Raffles; and I remember I shortly after formed the intention of naming the species *Pitta Rafflesi*, an intention never carried out—which I now much regret, as it would have been very pleasing to me that the bird should have borne the name of our celebrated countryman. The specimens referred to ornamented for many years the interesting Museum of the Zoological Society of London, the contents of which have since been scattered to the winds. Sumatra is unquestionably the native country of this fine bird; Mr. Elliot has added that of Malacca also—I believe, on the authority of Dr. Cantor; and he is probably correct in so doing, although, as yet, I have no positive evidence that any examples have been sent from there. The present bird not only differs from its two immediate congeners in being more redundantly coloured, but also in the female being more finely decorated than those of the other species; but, as will be seen on reference to the opposite Plate, she wants the blue and rich cross bars of the under surface.

Most, if not all the *Pittidæ* are solitary in their habits, and frequent the innermost and sterile parts of the forests almost too rugged for man to traverse, and which he would not venture to traverse did not his knowledge of birds tell him that the monotonous call he hears proceeds from one of nature's living jewels.

"Messrs. Müller and Schlegel, when writing on this species, say 'the mission to Sumatra with which we were intrusted in the first half of the year 1833 by the then Governor-General Baron Von der Bosch, enabled us to increase our collection by a considerable harvest, both as regards the department of animals and that of plants. Under obligations of gratitude toward his Excellency for the execution of our coveted enterprise, we chose to introduce into the realm of science one of the handsomest birds discovered in the island of Sumatra under his venerated name.

"*Pitta Boschii*, as regards its size, the shape of its bill, and the length of its feet and tail, resembles sufficiently the *Pitta cyanura*; and even the distribution of colours in general indicates in these two species a close mutual relationship, and a distinction from the other members of this family. The only specimen seen by us was shot on the south-eastern part of Sumatra, and is at present in the Leyden Museum."

The male has the centre of the crown deep black, bounded on each side by a broad band, which commences with rich yellow at the nostrils, gradually passes into rich orange, and finally on the nape into fiery or reddish orange; below this another band of black encircling the eyes, embracing the cheeks, and passing round the back of the neck; throat white, narrowly edged with yellow, which colour becomes rich orange on the sides of the neck; upper surface and wings cinnamon-brown, the tips of the coverts and outer edges of the secondaries margined with white slightly tinged with blue; upper tail-coverts and tail deep bright blue; under surface rich deep indigo blue, crossed on each side of the breast with narrow crescentic lines of fiery orange-red, which nearly meet in the centre; on each side, near the vent, a patch of yellowish buff; bill black, apparently flesh-colour on the base of the under mandible; legs and feet fleshy-brown.

The female is coloured like the male on the upper surface; but the under surface, in lieu of the indigo-blue and red lines, is crossed from the throat by narrow concentric lines of dark brown and dull yellow.

The figures represent the two sexes, of the natural size.

00138924

138924
0 598.295
Gou/Bir Gould, John.
The birds of Asia.
1850-1883.

Digitized with financial assistance from
Observer Research Foundation
on 17 May, 2019